# NOTICE OF PROPOSED RULEMAKING TITLE 20. COMMERCE, BANKING, AND INSURANCE CHAPTER 2. DEPARTMENT OF WEIGHTS AND MEASURES $\underline{PREAMBLE}$

<u>1.</u>	Sections Affected	Rulemaking Action
	R20-2-701.	Amend
	R20-2-702.	Amend
	R20-2-708.	Amend
	R20-2-709.	Amend
	R20-2-710.	Amend
	R20-2-711.	Amend
	R20-2-714.	Amend
	R20-2-715.	Amend
	R20-2-716.	Amend
	R20-2-717.	Amend
	R20-2-718.	New Section
	R20-2-719.	New Section
	R20-2-750.	Amend
	R20-2-751.	Amend
	R20-2-752.	Amend
	R20-2-753.	Amend
	R20-2-755.	Amend
	R20-2-757.	Amend
	R20-2-758.	Repeal
	R20-2-759.	Amend
	R20-2-760.	Amend
	Table 1.	Amend
	Table 2.	Amend

## 2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 41-2065(A)(4) and (D) Implementing statute: A.R.S. §§ 41-2083 and 41-2122

#### 3. <u>List of all previous notices appearing in the Register addressing the proposed rules:</u>

Notice of Rulemaking Docket Opening: 11 A.A.R. 2451 (July 1, 2005)

### 4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Duane Yantorno

Address: Department of Weights and Measures

4425 West Olive, Ste. 134

Glendale, AZ 85302

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## 5. An explanation of the rules, including the agency's reasons for initiating the rulemaking:

In consultation with the Department of Environmental Quality, the Department of Weights and Measures is changing fuel formulation, quality assurance, and other requirements related to CBG (Cleaner Burning Gasoline) and conventional motor fuel to reflect recent legislative changes and industry standards. The Department is also making the rules more clear, concise, and understandable.

The following changes are made so the rules are consistent with recent statutory changes:

- Includes statutory definitions;
- Clarifies the definition of "gasoline" to exclude E85;
- Clarifies that E85 is a motor fuel rather than gasoline;
- Establishes labeling and dispenser requirements for motor fuel dispensing sites that dispense E85;
- Establishes reporting requirements for producers of E85;
- Adds statutory requirements for biodiesel;
- Prohibits use of MTBE in motor fuel;
- Recognizes a downstream tolerance of a maximum 3.7 weight percent oxygen for ethanol;
- Establishes the maximum vapor pressure allowed for Arizona CBG in February and March;
- Shortens the winter oxygenate season to November 1 through January 31 rather than November 2 through March 31; and

 Adopts use of the CARBOB (California Reformulated Blendstock for Oxygenated Blending) model for certifying an alternative formulation of AZRBOB.

NOTE: Portions of the rulemaking dealing with CARB Phase 3 Reformulated Gasoline will not become effective until Arizona's State Implementation Plan (SIP) dealing with CARB Phase 3 Reformulated Gasoline is approved by the EPA.

The following changes are designed to provide flexibility to the industry, facilitate use of E85, and protect the public and the environment:

- Establishes standards for E85 (fuel ethanol);
- Establishes specifications for ethanol used as a blending component in AZRBOB or Arizona CBG;
- Requires producers outside the CBG-covered area to ensure that a motor fuel produced or offered for sale meets motor-fuel specifications and has its octane certified;
- Reduces the amount of sulfur allowed in Arizona CBG to 80 ppm;
- Requires a registered supplier, third-party terminal, or pipeline that has submitted a
  quality assurance/quality control plan to the Department to resubmit the plan if
  significant changes are made to the plan;
- Allows a registered supplier to contract with an independent third party to perform
  the required quality assurance sampling and testing of AZRBOB after the addition of
  ethanol;
- Establishes additional test methodologies for use in certifying Arizona CBG and AZRBOB; and
- Allows use of alternative test methodologies approved by the Director if required correlations are done.
- A reference to any study relevant to the rules that the agency reviewed and either proposes to rely on in its evaluation of or justification for the rules or proposes not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

A copy of the following study is available from the Department:

Cost, Supply, and Emissions Impacts of Adopting the California Phase 3 Gasoline Standard for Arizona's Cleaner Burning Gasoline Program: A Technical and Economic Analysis of Cleaner Burning Gasoline Supply under HB 2207; MathPro, Inc. (PO Box 34404, West Bethesda, MD 20827-0404) and Meszler Engineering Services (906 Hamburg Drive, Abingdon, MD 21009); December 1, 2005

## 7. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

#### 8. The preliminary summary of the economic, small business, and consumer impact:

The economic, small business, and consumer impact statement will not consider the economic impacts that result from establishing reporting requirements for producers of E85, requiring labels on dispensers of E85, prohibiting MTBE in motor fuel, establishing the maximum vapor pressure allowed for Arizona CBG during February and March, shortening the winter oxygenate season, and adopting use of the CARBOB model for certifying an alternative formulation of AZRBOB. These changes were made by the legislature rather than this rulemaking.

The 2005 federal energy bill spurred the search for a practical alternative motor fuel. As a result of this rulemaking, E85 may now be sold or offered for sale within the CBG-covered area. The rulemaking sets standards for E85.

E85 consists of 85% ethanol and 15% gasoline. The ethanol typically is produced from corn or other grain products but can be produced from agricultural and forestry wastes. The resources used to make ethanol are renewable. The production process leaves the nutritional content of the grain products largely intact and still suitable for use in feeding livestock. E85 has an octane of approximately 105. E85 reduces the incidence of greenhouse emissions and is water soluble, non-toxic, and biodegradable. Increased use of E85 will promote energy independence and benefit farmers who grow grain products and producers of E85. E85 can be used in a "flex-fuel" motor vehicle, which is designed to operate on either gasoline or E85. The EPA estimates there are approximately 350,000 flex-fuel motor vehicles in Maricopa County but most are operated on gasoline because E85 is not widely available. The City of Maricopa plans to build an ethanol facility in the near future and will use the production byproducts in a cattle feed lot adjacent to the ethanol facility.

This rulemaking will have economic benefits for those who produce the biomass products used in the production of ethanol and for those who produce the ethanol. It will also have an economic impact on the owner of a flex-fuel motor vehicle because the owner will be able to buy E85 more readily.

Requiring a producer outside the CBG-covered area to ensure that a motor fuel produced or offered for sale meets all motor-fuel specifications and has its octane certified will impose economic costs on only the two producers not currently in compliance with this requirement. Currently, the owner or operator of a motor fuel dispensing site is required to ensure that motor fuel sold or offered for sale meets all motor-fuel specifications. Because there are more than 2,000 motor fuel dispensing sites, the cost of compliance is huge and compliance is difficult for the owner or operator of a motor fuel dispensing site. The rule change places the responsibility for ensuring compliance with motor-fuel specifications on producers, who are in best position to comply. This will have a significant economic benefit for consumers and owners or operators of motor fuel dispensing sites by ensuring that they receive the quality of motor fuel they believe they are receiving. It will also reduce the number of complaints received by the Department regarding bad motor fuel. During 2002 through 2005, the Department received 203 complaints about fuel quality. If a consumer inadvertently purchases motor fuel that does not meet motor-fuel specifications, the consumer may experience major engine damage and costs.

Reducing the amount of sulfur allowed in a motor fuel from 500 to 80 ppm ensures that Arizona's standards are consistent with the federal standard. The reduction of sulfur helps reduce ozone precursors. An exception is made for a small refinery. The EPA is requiring that motor fuel contain only 30 ppm on average by later this year. The rule change will have little economic effect because producers already comply with the federal standard.

The rule changes regarding quality assurance/quality control, test methodologies, and use of an independent third party provide increased flexibility to registered suppliers, pipelines, and third-party terminals and ensure that the Department is apprised of the quality assurance/quality control procedures being used. The increased flexibility may provide economic benefits for registered suppliers, pipelines, and third-party terminals. The rule changes may provide increased economic opportunity for independent third

parties that contract to do quality assurance/quality control sampling and testing of AZRBOB.

## 9. The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

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4425 West Olive, Ste. 134

Glendale, AZ 85302

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## 10. The time, place, and nature of the proceedings for the making, amendment, or repeal of the rules or, if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rules:

An oral proceeding regarding the proposed rules will be held as follows:

Date: Monday, June 12, 2006

Time: 10:30 a.m.

Location: Department of Weights and Measures

4425 West Olive, Ste. 134

Glendale, AZ 85302

The rulemaking record will close at 5:00 p.m. on June 12, 2006.

## 11. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

A.R.S. §§ 41-2065(D), 41-2083(C), and 41-2122(B) require the director of the Department of Weights and Measures to consult with the director of the Department of Environmental Quality in making rules regarding quality standards and test methods for motor fuel including oxygenated fuel and approving alternate fuel control measures. This consultation was done.

#### <u>12.</u> <u>Incorporations by reference and their location in the rules:</u>

ASTM D 975-04c, Standard Specification for Diesel Fuel Oils, 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, incorporated at R20-2-702

ASTM D 4806-04a, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, incorporated at R20-2-702

ASTM D 4814-04a, Standard Specification for Automotive Spark-Ignition Engine Fuel, 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, incorporated at R20-2-702

ASTM D 5798-99, Standard Specification Fuel Ethanol (Ed75-Ed85) for Automotive Spark-Ignition Engines, re-approved 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, incorporated at R20-2-702

ASTM D 6751-03a, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, 2003, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, incorporated at R20-2-702.

California Air Resources Board, California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model, as amended April 25, 2001, CARB, P.O. Box 2815, Sacramento, CA 95812, incorporated at R20-2-702.

California Air Resources Board, The California Reformulated Gasoline Regulations, Title 13, California Code of Regulations, Section 2266.5 (Requirements Pertaining to California Reformulated Gasoline Blendstock for Oxygen Blending (CARBOB) and Downstream Blending), April 9, 2005, CARB, PO Box 2815, Sacramento, CA 95812, incorporated in R20-2-702

California Air Resources Board, Procedures for Using the California Model for California Reformulated Gasoline Blendstocks for Oxygenate Blending (CARBOB), adopted April 25, 2001, CARB, P.O. Box 2815, Sacramento, CA 95812, incorporated in R20-2-702

13. The full text of the rules follows:

## TITLE 20. COMMERCE, BANKING, AND INSURANCE CHAPTER 2. DEPARTMENT OF WEIGHTS AND MEASURES

#### ARTICLE 7. MOTOR FUELS AND PETROLEUM PRODUCTS

Section

R20-2-701. Definitions
R20-2-702. Material Incorporated by Reference
R20-2-708. Oxygenated Fuel Blends
R20-2-709. Retail Oxygenated Fuel Labeling
R20-2-710. Blending Requirements
R20-2-711. Alcohol-oxygenated Gasoline Storage Tank Requirements
R20-2-714. Requirements for Gasoline Products Outside Motor Fuels outside the CBG-covered
Area
R20-2-715. Motor Fuel Quality Testing Methods and Requirements
R20-2-716. Sampling and Access to Records
R20-2-717. Hold Open Hold-open Latch Exception
R20-2-718. Renumbered Requirements for the Production or Sale of E85
R20-2-719. Repealed Requirements for the Sale of Biodiesel
R20-2-750. Registration Relating to Arizona CBG or AZRBOB
R20-2-751. Arizona CBG Requirements
R20-2-752. General Requirements for Registered Suppliers
R20-2-753. General Requirements for Pipelines and Third-party Terminals
R20-2-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending
R20-2-757. Product Transfer Documentation; Records Retention
R20-2-758. Adoption of Fuel Certification Models Repealed
R20-2-759. Testing Methodologies
R20-2-760. Compliance Surveys
Table 1. Type 1 Gasoline Arizona CBG Standards
Table 2. Type 2 Gasoline Arizona CBG Standards

#### ARTICLE 7. MOTOR FUELS AND PETROLEUM PRODUCTS

#### R20-2-701. Definitions

In addition to the definitions in R20-2-101, the following definitions apply to this Article unless the context otherwise requires:

- 1. "Area A" has the same meaning as in A.R.S. § 49-541.
- 2. "Area B" has the same meaning as in A.R.S. § 49-541.
- 3. "Arizona Cleaner Burning Gasoline" or "Arizona CBG" means a gasoline blend that meets the requirements of this Article for gasoline produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles within the CBG-covered area, except as provided under A.R.S. § 41-2124(K).
- 4. "AZRBOB" or "Arizona Reformulated Blendstock for Oxygenate Blending" means a petroleum-derived motor fuel combination of gasoline blendstocks that is intended to be or is represented to constitute Arizona CBG upon the addition of a specified type and percentage amount (or range of percentages amounts) of oxygenate ethanol after the fuel has been blendstock is supplied from the production or import facility at which it was produced or imported.
- 5. "Batch" means a quantity of gasoline motor fuel or AZRBOB that is homogeneous for those motor fuel properties specific for the motor fuel standards applicable to that motor fuel or AZRBOB that are specified for Arizona CBG certified under R20-2-751.
- 6. "Beginning of transport" means the point at which:
  - a. A registered supplier relinquishes custody of Arizona CBG or AZRBOB to a transporter or a third-party terminal; or
  - b. A registered supplier who retains custody of Arizona CBG or AZRBOB commences begins transfer of the Arizona CBG or AZRBOB into a vessel, tanker, or other container for transport to the CBG covered CBG-covered area.
  - "Biodiesel" means a diesel fuel substitute that satisfies all of the following:

    Is produced from nonpetroleum renewable resources if the qualifying volume of
    nonpetroleum renewable resources meets the standards for California diesel fuel as
    adopted by the California air resources board pursuant to 13 California code of
    regulations sections 2281 and 2282 in effect on January 1, 2000.

    Meets the registration requirement for fuels and additives established the
    environmental protection agency pursuant to section 211 of the clean air act as
    defined in section 49-401.01.

The use of the diesel fuel substitute complies with the requirements listed in 10 Code of Federal Regulations part 490, as printed in the federal register, volume 64, number 96, May 19, 1999.

<u>Is sold, offered or exposed for sale as a neat product or blended with diesel fuel.</u>

- 7. "Blendstock" means any liquid compound that is blended with other another liquid compounds compound to produce a motor fuel, including Arizona CBG. Deposit control additives A deposit-control or other similar additives additive registered under 40 CFR 79 are is not considered blendstocks a blendstock.
  - "CARB" means the California Air Resources Board.
  - "CARBOB" means California Reformulated Gasoline Blendstock for Oxygenate Blending.
- 8. "CBG covered CBG-covered area" means a county with a population of 1,200,000 or more persons according to the most recent United States decennial census and any portion of a county contained in within area A.
- 9. "Conventional gasoline" means gasoline that conforms with to the requirements of this Chapter for sale or use in Arizona, but does not meet the requirements of Arizona CBG or AZRBOB.
- 10. "Co-solvent" means a chemical compound soluble in, and added to, a methanol-gasoline blend to prevent phase separation, reduce corrosion, and improve lubrication. A cosolvent may be any one or a mixture of the following:
  - a. Ethanol,
  - b. Any propanol,
  - c. Any butanol, or
  - d. Gasoline grade tertiary butyl alcohol.
- 41. "Designated alternative limit" means a motor fuel property specification, expressed in the nearest part per million by weight for sulfur content, nearest 10th percent by volume for aromatic hydrocarbon content, nearest 10th percent by volume for olefin content, and nearest degree Fahrenheit for T90 and T50, that is assigned by a registered supplier to a final blend of Type 2 Arizona CBG or AZRBOB for purposes of compliance with the Predictive Model.
- 12. "Diesel" or "diesel fuel" means a refined middle distallate distillate for use as a motor fuel in a compression-ignition internal-combustion engine.
- 13. "Downstream oxygenate blending" means combining AZRBOB and an oxygenate ethanol to produce fungible Arizona CBG.

- "Duplicate" means a portion of a sample that is treated the same as the original sample to determine the precision of an analytical method.
- "EPA" means the United States Environmental Protection Agency.
- 14. "EPA waiver" means a waiver granted by the Environmental Protection Agency as described in "Waiver Requests under Section 211(f) of the Clean Air Act," which is incorporated by reference in R20-2-702.
  - "Ethanol" means denatured ethanol that meets the specifications in ASTM D 4806, which is incorporated by reference in R20-2-702.
  - "E85" means an ethanol gasoline blend that meets the specifications in ASTM D 5798, which is incorporated by reference in R20-2-702.
- 45. "Final distribution facility" means a stationary gasoline motor-fuel transfer point from at which motor fuel or AZRBOB is transferred into a cargo tank truck, pipeline, or other delivery vessel from which the motor fuel or AZRBOB will be delivered to a gasoline motor-fuel dispensing site. A cargo tank truck is a final distribution facility if the cargo tank truck transports motor fuel or AZRBOB and carries documentation that the type and amount or range of amounts of oxygenates designated by the registered supplier will be or have been blended directly into the cargo tank truck before delivery of the resulting motor fuel to the gasoline a motor-fuel dispensing site.
  - "Fleet" means at least 25 motor vehicles owned or leased by the same person.

    "Fleet vehicle fueling facility" means a facility or location where a motor fuel is dispensed for final use by a fleet.
- 16. "Fuel" means any material capable of releasing energy or power by combustion or other chemical or physical reaction.
- 17. "Fuel property" means any characteristic listed in R20-2-751(A)(1) through (A)(7), R20-2-751(B)(1) through (B)(7), or Table 2.
  - "Gasoline" means a volatile, highly flammable liquid mixture of hydrocarbons that does not contain more than .05 grams of lead for each United States gallon, is produced, refined, manufactured, blended, distilled, or compounded from petroleum, natural gas, oil, shale oils or coal, and other flammable liquids free from undissolved water, sediment, or suspended matter, with or without additives, and is commonly used as a fuel for spark-ignition internal-combustion engines. Gasoline does not include diesel fuel or the ethanol blend E85 as defined in ASTM D5798-99.
- 18. "Importer" means any person who that assumes title or ownership of Arizona CBG or AZRBOB produced by an unregistered supplier.

- "Manufacturer's proving ground" means a facility used only to develop complete, advanced, motor vehicles for an automotive manufacturer.
- 19. "Motor fuel" means petroleum or a petroleum-based substance that is such as motor gasoline, aviation gasoline, or any grade of oxygenated gasoline, number one or number two diesel fuel, including a biodiesel blend, or E85 or any grade of oxygenated gasoline typically used in the operation of a motor engine.
  - "Motor fuel dispensing site" means a facility or location where a motor fuel is dispensed into commerce for final use.
  - "Motor fuel property" means any characteristic listed in R20-2-751(A)(1) through (A)(7), R20-2-751(B)(1) through (B)(7), Table 2, or any other motor fuel standard referenced in this Article.
- 20. "Motor vehicle" means any <u>a</u> vehicle equipped with a spark-ignited or compressionignition internal-combustion engine except:
  - a. Vehicles A vehicle that run runs on, or are is guided by, rails; or
  - b. Vehicles A vehicle that are is designed primarily for travel through air or water.

    "Motor vehicle racing event" means a competition, including related practice, qualifying, and demonstration laps, that uses unlicensed motor vehicles designed and manufactured specifically for racing and is conducted on a public or private racecourse for the entertainment of the general public.
- 21. "MTBE" means methyl tertiary butyl ether.
- 22. "NOx" means oxides of nitrogen.
- 23. "Octane," "octane number," or "octane rating" mean the anti-knock characteristic of gasoline as determined by the resultant arithmetic test average of ASTM D2699 and ASTM D2700.
- 24. "Oxygenate" means any oxygen-containing ashless, organic compound, including aliphatic alcohols and aliphatic ethers, which is able to that may be used as a fuel or as a gasoline blending component and is approved as a blending agent under the provisions of a waiver issued by the EPA under 42 U.S.C. 7545(f).
- 25. "Oxygenate\_blending facility" means any location (including a truck) where oxygenate ethanol is added to Arizona CBG or AZRBOB, and the resulting quality or quantity of Arizona CBG is not altered in any other manner except for the addition of deposit control additives a deposit-control or other similar additives additive registered under 40 CFR 79.

- 26. "Oxygenate blender" means any a person who owns, leases, operates, controls, or supervises an oxygenate\_blending facility, or who owns or controls the blendstock or gasoline used, or the gasoline produced, at an oxygenate-blending facility.
- 27. "Oxygenated Arizona CBG" means Arizona CBG with a minimum oxygen content of 3.5
  3.7 wt. % or another minimum oxygen content approved by the Director under A.R.S. §
  41-2124, that is produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles in the CBG-covered area from November 1 through March
  January 31 of each year.
- 28. "Oxygen content" means the percentage by weight of oxygen contained in a gasoline oxygenate blend as calculated by ASTM D4815-94a D 4815.
- <del>29.</del> "Performance standard" means the VOC and NOx emission reduction percentages in R20-2-751(A)(8), R20-2-751(A)(9), and Table 1.
- 30. "Pipeline" means a transporter who owns or operates an interstate common-carrier pipe to transport motor fuels into Arizona.
- 31. "PM" or "Predictive Model Procedures" means the California Predictive Model, and California Air Resources Board's CARB's "California Procedures for Evaluating Alternative Specification Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," as adopted April 20, 1995, and "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model," as amended April 25, 2001, both of which are which is incorporated by reference in R20-2-758 R20-2-702.
- 32. "PM alternative gasoline formulation" means a final blend of Arizona CBG or AZRBOB that is subject to a set of PM alternative specifications.
- 33. "PM alternative specifications" means the specifications for the following fuel properties, as determined under using a testing methodology at R20-2-759:
  - a. Maximum RVP, expressed in the nearest 100th of a pound per square inch;
  - b. Maximum sulfur content, expressed in the nearest part per million by weight;
  - e. Maximum olefin content, expressed in the nearest 10th of a percent by volume;
  - d. Minimum and maximum oxygen content, expressed in the nearest 10th of a percent by weight;
  - e. Maximum T50, expressed in the nearest degree Fahrenheit;
  - f. Maximum T90, expressed in the nearest degree Fahrenheit; and
  - g. Maximum aromatic hydrocarbon content, expressed in the nearest 10th of a percent by volume.

- 34. "PM averaging compliance option" means, with reference to a specific fuel property, the compliance option for PM alternative gasoline formulations by which final blends of Arizona CBG and AZRBOB are assigned designated alternative limits under R20-2-751(F), (G), and (H), (I).
- 35. "PM averaging limit" means a PM alternative specification that is subject to the PM averaging compliance option.
- 36. "PM flat limit" means a PM alternative specification that is subject to the PM flat limit compliance option.
- 37. "PM flat limit compliance option" means, with reference to a specific fuel property, the compliance option that each gallon of gasoline must meet for the that specified fuel property as contained in the PM alternative specifications.

#### 38. "Produce" means:

- a. Except as otherwise provided in subsections (b) or (c), to convert a liquid compound that is not Arizona CBG or AZRBOB into Arizona CBG or AZRBOB. If a person blends blendstocks a blendstock that are is not Arizona CBG or AZRBOB with Arizona CBG or AZRBOB acquired from another person, and the resulting blend is Arizona CBG or AZRBOB, the person conducting the blending produces only the portion of the blend not previously Arizona CBG or AZRBOB. If a person blends Arizona CBG or AZRBOB with other of Arizona CBG or AZRBOB in accordance with this Article, without the addition of blendstocks a blendstock that are is not Arizona CBG or AZRBOB, that person is not a producer of Arizona CBG or AZRBOB.
- b. If a person supplies Arizona CBG or AZRBOB to a refiner who agrees in writing to further process the Arizona CBG or AZRBOB at the refiner's refinery and be treated as the producer of the Arizona CBG or AZRBOB, the refiner is deemed the producer of the Arizona CBG or AZRBOB.
- e. If an oxygenate blender blends oxygenates into AZRBOB supplied from a gasoline production facility or import facility, and does not alter the quality or quantity of the AZRBOB or the quality or quantity of the resulting Arizona CBG certified by a registered supplier in any other manner except for the addition of deposit control additives a deposit-control or other similar additives additive, then the producer or importer of the AZRBOB, rather than the oxygenate blender, is not a producer of any portion of the resulting Arizona CBG, and the producer or importer of the AZRBOB

- is considered the producer or importer of the full volume of the resulting Arizona CBG.
- 39. "Producer" means a refiner or other person who produces motor fuels, including Arizona CBG or AZRBOB.
- 40. "Production facility" means a facility where at which motor fuels, including Arizona CBG or AZRBOB, is are produced. Upon request of a producer, the Director may designate, as part of the producer's production facility, a physically separate bulk storage facility that:

  a. Is owned or leased by the producer,
  - b. Is operated by or at the direction of the producer, and
  - e. Is used to store or distribute motor fuels, including Arizona CBG or AZRBOB, that is are supplied only from the production facility.
  - "Product transfer document" means a bill of lading, loading ticket, manifest, delivery receipt, invoice, or other paper evidencing that a person transfers custody or title of motor fuel except when motor fuel is sold or dispensed at a motor fuel dispensing site or fleet vehicle fueling facility.
- 41. "Refiner" means any <u>a</u> person who owns, leases, operates, controls, or supervises a refinery in the United States, including its trust territories.
- 42. "RVP" means Reid vapor pressure equivalent of gasoline or blendstock as measured by ASTM D 5191.
- 43. "Refinery" means a facility that produces <u>a</u> liquid <u>fuels fuel</u>, including Arizona CBG or AZRBOB, by distilling petroleum, or a transmix facility that produces a motor fuel offered for sale or sold into commerce as a finished motor fuel.
- 44. "Registered supplier" means any <u>a</u> producer or importer who supplies Arizona CBG or AZRBOB and is registered with the Director under R20-2-750.
- 45. "Reproducibility" means the testing method margin of error as provided in the ASTM specification or other testing method required under this Article.
- 46. "Service station" means a retail business operated for the purpose of dispensing motor fuel into the fuel tanks of motor vehicles."S-RGAS" means gasoline produced by a small refinery as defined by EPA at 40 CFR
  - 80.225.
- 47. "Supply" means to provide or transfer motor fuel to a physically separate facility, vehicle, or transportation system.

- "Test result" means any document that contains a result of testing including all original test measures, all subsequent test measures that are not identical to the original test measure, and all worksheets on which calculations are performed.
- 48. "Third-party terminal" or "3rd-party terminal" means an owner or operator of a gasoline storage tank facility who that accepts custody, but not ownership, of Arizona CBG or AZRBOB from a registered supplier, oxygenate blender, pipeline, or other third-party terminal and relinquishes custody of the Arizona CBG or AZRBOB to a transporter-for interstate transport into Arizona.
- 49. "Transmix" means a mixture of petroleum distillate fuel and gasoline that does not meet
  the Arizona standards for either petroleum distillate fuels or gasoline.
  "Transmix facility" means a facility at which transmix is processed into its components
  and then the components either are combined with a finished product or further processed
  to produce a finished motor fuel.
- 50. "Transporter" means any a person who is not a producer or importer and who:
   a. Causes causes transport of motor fuels, including Arizona CBG or AZRBOB, into or within Arizona; and
  - b. Does not acquire title or assume ownership of the Arizona CBG or AZRBOB.
- 51. "Type 1 gasoline Arizona CBG" means a gasoline that meets the standards contained in R20-2-751(A) and Table 1.
- 52. "Type 2 gasoline Arizona CBG" means a gasoline that meets the standards contained in Table 2, or is certified using the PM according to the requirements of R20-2-751(F), (G), and (H) and (I), and:
  - a. Meets the requirements in R20-2-751(A) beginning April February 1 through October 31 of each year; and
  - b. Meets the requirements in R20-2-751(B) beginning November 2 1 through March January 31 of each year.
  - "Vehicle emissions control area" has the same meaning as in A.R.S. § 49-541 except that a vehicle emissions control area does not include a manufacturer's proving ground that is located in the vehicle emissions control area.
- 53. "VOC" means volatile organic compound.
  "Winter" means November 1 through January 31.

#### **R20-2-702.** Material Incorporated by Reference

The following documents are incorporated by reference and on file with the Department. The documents incorporated by reference contain no future editions or amendments.

- 1. 16 CFR 306 Automotive Fuel Ratings, Certification and Posting, January 1, 1998
   Edition, Superintendent of Documents, U.S. Government Printing Office, Mail Stop SSOP, Washington, D.C. 20402-9328.
- ASTM D 975-98b 975-04c, Standard Specification for Diesel Fuel Oils, published in
   ASTM Annual Book of Standards, Petroleum Products, Lubricants, and Fossil Fuels,
   Volume 05.01, 20012004, American Society for Testing and Materials, 100 Barr Harbor
   Drive, West Conshohocken, PA 19428-2959.
- 3. ASTM D 4806-04a, Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel, 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- 3.4. ASTM D 4814-00 4814-04a, Standard Specification for Automotive Spark-Ignition Engine Fuel, published in ASTM Annual Book of Standards, Petroleum Products, Lubricants, and Fossil Fuels, Volume 05.02, 2001 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- 4. <u>5.</u> Waiver Requests under Section 211(f) of the Clean Air Act, (August 22, 1995 edition), United States Environmental Protection Agency, Transportation and Regional Programs Division, Fuels Program Support Group, Mail Code <u>6406J</u> <u>6406-J</u>, Washington, D.C. 20460.
- 6. ASTM D 5798-99, Standard Specification for Fuel Ethanol (Ed75-Ed85) for Automotive Spark-Ignition Engines, re-approved 2004, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- ASTM D 6751-03a, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, 2003, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- 8. California Air Resources Board, "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," adopted April 20, 1995. A copy may be obtained at: CARB, P.O. Box 2815, Sacramento, CA 95812.
- 9. California Air Resources Board, "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model," as amended April 25, 2001. A copy may be obtained at: CARB, P.O. Box 2815, Sacramento, CA 95812.

- 10. The Federal Complex Model as contained in 40 CFR 80.45, January 1, 1999. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.
- 11. California Air Resources Board, The California Reformulated Gasoline Regulations, Title 13, California Code of Regulations, Section 2266.5 (Requirements Pertaining to California Reformulated Gasoline Blendstock for Oxygen Blending (CARBOB) and Downstream Blending), as of April 9, 2005. A copy may be obtained at: CARB, P.O. Box 2815, Sacramento, CA 95812.
- 12. California Air Resources Board, Procedures for Using the California Model for California Reformulated Gasoline Blendstocks for Oxygenate Blending (CARBOB), adopted April 25, 2001. A copy may be obtained at: CARB, P.O. Box 2815, Sacramento, CA 95812.

#### **R20-2-708.** Oxygenated Fuel Blends

A person who has custody of gasoline blended with an oxygenate shall ensure that the amount of oxygenate does not exceed the amount allowed by EPA waivers, Section 211(f) of the Clean Air Act, and A.R.S. § 41-2122. The maximum oxygen content of gasoline shall not exceed 3.7 percent by weight for ethanol and as specified in A.R.S. § 41-2122 for other oxygenates. Except as allowed by EPA waivers, gasolines blended with methanol shall contain a corrosion inhibitor in an amount specified by the manufacturer of the inhibitor. Any gasoline blend containing methanol shall contain a co-solvent in an amount equal to or greater than the amount allowed by EPA waivers for gasolines within the oxygen limits allowed.

#### R20-2-709. Retail Oxygenated Fuel Labeling

- A. A service station The owner or operator of a motor fuel dispensing site shall ensure that a service station motor fuel dispenser that offers gasoline containing an oxygenate, or combination of oxygenates, ethanol that results in a gasoline blend containing 1.5% percent or more by weight of oxygen is clearly labeled with the oxygenate ethanol volume information. If only one oxygenate is blended into a gasoline, each Each face of each motor fuel dispenser shall be clearly labeled with the oxygenate volume information if the percent by volume is:
  - 1. More than 0.3% by volume of methanol,
  - 2. More more than 4.3% percent by volume of ethanol,
  - 3. More than 8.3% by volume of MTBE, or

- 4. Any other oxygenate or combination of oxygenates at a level that requires an EPA waiver.
- B. A service station The owner or operator of a motor fuel dispensing site shall ensure that labels required under subsection (A) are displayed on the upper 60% percent of each face of each motor fuel dispenser. The label indicating the maximum percent by volume of each oxygenate contained in the oxygenated fuel shall state:
  - + "Contains up to \_\_\_\_\_ % ethanol;."
  - 2. Contains up to \_\_\_\_\_ % methanol and \_\_\_\_\_ % co-solvent;
  - 3. Contains up to \_\_\_\_\_ % ether (MTBE); or
  - 4. Contains up to \_\_\_\_\_ % other (specify name of oxygenate).
- C. In the CBG-covered area and area B, a service station the owner or operator of a motor fuel dispensing site shall ensure that a label displayed on each face of each service station motor fuel dispenser also contains the following statement: "This gasoline is oxygenated and will reduce carbon monoxide emissions from motor vehicles." The statement may be printed on the label required in subsection (B) or on a separate label. If the statement is printed on a separate label, the label shall be displayed next to the label required in subsection (B).
- D. A service station owner or operator shall ensure that any other oxygenate blended with gasoline is disclosed in the format described in subsections (B) and (C).
- E.D. A service station The owner or operator of a motor fuel dispensing site shall ensure that:
  - 1. The label required by subsection (B) is clean, legible, and visible at all times;
  - 2. The label is printed in black or white block letters on a sharply contrasting background; and
  - 3. The lettering on labels required by subsections (B) and (C) is no less than 1/4".

#### **R20-2-710. Blending Requirements**

- A. A person who has custody of or transports an oxygenated gasoline blend shall ensure than that no neat oxygenate blending occurs at a service station motor fuel dispensing site or fleet location vehicle fueling facility.
- B. If a service station motor fuel dispensing site storage tank contains an oxygenated gasoline blend that does not contain the amount of oxygen required by A.R.S. §§ 41-2122, 41-2123, 41-2125, or R20-2-751, the service station owner or operator of the motor fuel dispensing site shall do one of the following:
  - 1. Add gasoline that contains no more than 20% percent by volume of any the same oxygenate to the non-compliant oxygenated gasoline blend;

- 2. Add a gasoline blend that dilutes the <u>non-compliant</u> oxygenated gasoline blend to the level of oxygen content required by A.R.S. §§ 41-2122, 41-2123, 41-2125, or R20-2-751; or
- 3. Empty the storage tank and replace the <u>non-compliant oxygenated gasoline blend</u> with a required oxygenate blend.

#### R20-2-711. Alcohol-oxygenated Gasoline Storage Tank Requirements

- A. Before a person adds an alcohol-oxygenated gasoline into a storage tank, the person shall:
  - 1. Test the <u>storage</u> tank for the presence of water and, if any water is detected, remove it the <u>water</u> from the <u>storage</u> tank; and
  - 2. Install <u>a fuel filters filter</u> designed for use with alcohol-oxygenated gasoline in the fuel line of all <u>motor fuel</u> dispensers that dispense alcohol-oxygenated gasoline <del>blends</del>.
- B. If water of a mixture of alcohol and water is detected in a storage tank or in an alcohol-oxygenated gasoline at any time in a storage tank, the owner or operator shall empty the storage tank.

### R20-2-714. Requirements for Gasoline Products Outside Motor Fuels outside the CBG-covered Area

- A. A person who owns or operates a service station motor fuel dispensing site or transmix or production facility outside the CBG-covered area shall ensure that gasoline and gasoline oxygenate blends a motor fuel offered for sale at a service station the motor fuel dispensing site or transmix or production facility outside the CBG-covered area meet meets all the ASTM D 4814-00 requirements specifications in ASTM D 4814-04a except:
  - 1. The minimum vapor pressure shall be 6.4 pounds per square inch;
  - 2. From May 1 through September 30, maximum vapor pressure shall be 9.0 pounds per square inch;
  - 3.2. For gasoline blends, the vapor pressure may be one pound per square inch greater than the vapor pressures established by ASTM D 4814-00-4814-04a during:
    - a. May 1 through September 15, if the base fuel gasoline blend meets the requirements of ASTM D 4814-00 4814-04a, the volatility requirements of subsection (A)(2) (A)(1), and the final gasoline-ethanol blend contains at least nine percent ethanol by volume but does not exceed EPA waivers; and
    - b. September 16 through April 30, if the base fuel gasoline blend meets the requirements of ASTM D 4814-00 4814-04a and the final gasoline-ethanol blend contains at least 1.5 percent ethanol by weight and does not exceed EPA waivers.

- B. A service station The owner or operator of a motor fuel dispensing site shall ensure that the finished gasoline is visually free of water, sediment, and suspended matter and is clear and bright at ambient temperature or 70° F (21° C), whichever is greater.
- C. A service station The owner or operator of a motor fuel dispensing site or transmix or production facility shall ensure that the minimum octane rating determined by the test average of ASTM D 2699 and ASTM D 2700, also known as the (R+M)/2 method, is:
  - 1. 87 for unleaded or regular;
  - 2. 88 for mid\_grade, extra, or any other gasoline with an octane rating of 88 or higher; and
  - 3. 90 for super, high performance, premium, or any other gasoline with an octane rating of 90 or higher.
- D. Prohibited activities regarding a motor fuel sold or offered for sale outside the CBG-covered area.
  - 1. The owner or operator of a motor fuel dispensing site shall not sell or offer for sale from the motor fuel dispensing site storage tank a product that is not a motor fuel;
  - 2. The owner or operator of a motor fuel dispensing site or transmix or production facility shall not sell or offer for sale a motor fuel that contains more than 0.3 volume percent MTBE or more than 0.1 weight percent oxygen from all other ethers or alcohols as listed in A.R.S. § 41-2122.
  - 3. A transporter shall not deliver to a motor fuel dispensing site or place in a motor fuel dispensing site storage tank a product that is not motor fuel.

#### **R20-2-715.** Motor Fuel Quality Testing Methods and Requirements

- A. Unless otherwise required in A.R.S. Title 41, Chapter 15, or this Chapter, a person testing a gasoline blend the producer of a motor fuel shall use test the motor fuel for its motor fuel properties using the methodologies in R20-2-702 and ensure that the motor fuel and meet meets the test requirements of ASTM D 4814-00 applicable specifications in R20-2-702.
- B. Unless otherwise required in A.R.S. Title 41, Chapter 15, or this Chapter, a person testing #1 or #2 diesel fuel shall use the methodologies and meet the test requirements specifications of ASTM D 975-98b 975-04c.
- C. The owner or operator of a transmix or production facility shall ensure that all gasoline sold or offered for sale outside the CBG-covered area has its octane rating determined and certified in accordance with 16 CFR 306. The owner or operator of a motor fuel dispensing site shall ensure that all gasoline sold or offered for sale outside the CBG-covered area has its octane rating posted in accordance with 16 CFR 306.

#### **R20-2-716.** Sampling and Access to Records

- A. The Department shall obtain motor fuel samples for testing from:
  - 1. The same motor fuel dispenser used for sales to customers;
  - 2. The same motor fuel dispenser used for dispensing motor fuel into fleet vehicles;
  - 3. A bulk storage facility;
  - A common carrier pipeline having custody of motor fuel, including Arizona CBG or AZRBOB;
  - 5. A transporter of motor fuel, including Arizona CBG or AZRBOB;
  - 6. A final distribution facility;
  - 7. A third-party terminal having custody of <u>motor fuel</u>, <u>including</u> Arizona CBG or AZRBOB;
  - 8. An oxygenate blender or registered supplier-; or
  - 9. A transmix or production facility.
- B. A person required by this Article to An owner or operator of a motor fuel dispensing site, pipeline, third-party terminal, or storage, transmix, production, or distribution facility, or a transporter, registered supplier, or oxygenate blender shall maintain for five years records relating to the production, importation producing, importing, blending, transport, distribution, or delivery transporting, distributing, delivering, testing, or storing of motor fuels, including Arizona CBG or AZRBOB, and shall ensure that make the records are available for Department inspection upon request.

#### **R20-2-717. Hold-open Latch Exception**

If a service station an owner or operator of a motor fuel dispensing site has a motor fuel nozzle equipped with a hold-open latch, the owner or operator shall ensure that the latch shall operate operates according to the manufacturer's specifications.

#### R20-2-718. Renumbered Requirements for the Production or Sale of E85

- A. A producer of E85 or the owner or operator of a motor fuel dispensing site that dispenses E85 shall ensure that the E85 sold or offered for sale in Arizona meets all the specifications in ASTM D 5798-99.
- B. An owner or operator of a motor fuel dispensing site shall ensure both the motor fuel dispenser and nozzle from which E85 is dispensed have labels affixed that indicate E85 is not

- gasoline and is intended for use only in a flexible-fuel vehicle, and stating "Check your owner's manual to ensure that this fuel can be used in your vehicle."
- C. An owner or operator of a motor fuel dispensing site shall ensure that any motor fuel dispenser from which E85 is dispensed is compatible with E85 and has received a National Type Evaluation Program Certificate of Conformance required under R20-2-203.
- D. A producer of E85 shall report to the Department, by the 15th of the month following the production of E85, the following information regarding the E85 production:
  - 1. The amount of ethanol used during the previous month,
  - 2. The amount of gasoline used during the previous month,
  - 3. The total amount of E85 produced during the previous month,
  - 4. The total amount of E85 sold during the previous month,
  - 5. The fuel quality properties for the gasoline and ethanol components making up each batch of E85, and
  - 6. The fuel quality properties of each batch of final E85 blend.
- E. A producer of E85 for sale in the CBG-covered area shall use Arizona CBG or AZRBOB as the gasoline portion of the E85 blend.

#### **R20-2-719.** Repealed Requirements for the Sale of Biodiesel

- A. A person shall not sell or offer or expose for sale biodiesel that is not tested or does not meet the specifications established by ASTM D6751 or any blend of biodiesel and diesel fuel that is not tested or does not meet the specifications established by ASTM D975 and that contains sulfur in excess of five hundred parts per million for use in area A as defined in section 49-541.
- B. A person who blends biodiesel that is intended as a final product for the fueling of motor vehicles shall report to the director by the fifteenth day of each month the quantity and quality of biodiesel shipped to or produced in this state during the preceding month. A person who supplies biodiesel subject to this subsection shall report the following by batch:
  - 1. The percentage of biodiesel in a final blend.
  - 2. The volume of the finished product.
  - 3. For neat biodiesel, the results of analysis for those parameters established by ASTM D6751.
  - 4. For biodiesel blended with any diesel fuel, the results of the analysis of the following motor fuel parameters as established by ASTM D975:
    - a. Sulfur content.

- <u>b.</u> Aromatic hydrocarbon content.
- c. Cetane number.
- d. Specific gravity.
- e. American petroleum institute gravity.
- f. The temperatures at which ten per cent, fifty per cent and ninety per cent of the diesel fuel boiled off during distillation.
- C. The report required under subsection B of this section shall be on a form prescribed by the director and shall contain a certification of truthfulness and accuracy of the data submitted and a statement of the supplier's consent permitting the department or its authorized agent to collect samples and access records as provided in rules adopted by the department. A corporate officer who is responsible for operations at the facility that produces or ships the final product shall sign the report.
- D. A person shall label dispensers at which biodiesel is dispensed in such a manner as to notify other persons of the volume percentage of biodiesel in the finished product and with the statement "This fuel contains biodiesel. Check the owner's manual or with your engine manufacturer before using."

#### R20-2-750. Registration Relating to Arizona CBG or AZRBOB

- A. Each of the following shall register with the Director prior to before the first date that the person will produce, import producing, importing, or obtain obtaining custody of Arizona CBG or AZRBOB:
  - 1. A refiner who produces Arizona CBG or AZRBOB;
  - 2. An importer who imports Arizona CBG or AZRBOB;
  - 3. An oxygenate blender who blends oxygenate with AZRBOB to produce Arizona CBG; or
  - 4. A pipeline or third-party terminal who that has custody of Arizona CBG or AZRBOB.
- B. A person listed in subsection (A) shall register on a form prescribed by the Director and shall include the following information:
  - 1. Business name, business address, and contact name or position title and telephone number;
  - 2. For each separate refinery and or oxygenate blending facility, the facility name, physical location, contact name or position title and, telephone number, and type of facility;
  - 3. For each separate refinery, and oxygenate blending facility, and for each or importer:
    - a. The location of the records required under this Article. If records are kept off-site, the primary off-site storage facility name, physical location, <u>and contact name or position title</u>, and telephone number; and

- b. If an independent laboratory is used to meet the requirements of R20-2-752(F), the name, and address of the independent laboratory, and contact name, or position title and telephone number of the independent laboratory.
- 4. If required under 40 CFR 80.76(d), the EPA registration number; and
- 5. A statement of the registrant's consent permitting the Department or its authorized agent to collect samples and access records as provided in R20-2-716.
- C. Changes to any information in A person registered under subsection (B) shall be sent to notify the Director not later than within 10 days after the effective date of the a change in any of the information provided under subsection (B).
- D. If a refiner, importer, or oxygenate blender fails to register under this Section, all Arizona CBG or AZRBOB <u>produced by the refiner or oxygenate blender or imported by the importer and</u> transported to the CBG\_covered area is presumed <del>noncomplying to be noncompliant</del> from the date that the registration should have occurred.
- E. The Department shall maintain a listing list of all registered suppliers.

#### R20-2-751. Arizona CBG Requirements

A. General requirements. In addition to the other requirements of this Article and except as provided in subsection (B), all Arizona CBG shall meet the following requirements and for any fuel property not specified, shall meet the requirements in ASTM D 4814-04a. The dates in this subsection are compliance dates for service station operators the owner or operator of a motor fuel dispensing site or a and fleet owners vehicle fueling facility.

#### **Fuel Property/Performance Standard - Limits**

- 1. Sulfur: 500 80 ppm by weight (max) (except in the case of documented S-RGAS)
- 2. Aromatics: 50% percent by volume (max)
- 3. Olefins: 25% percent by volume (max)
- 4. E200: 70-30% percent volume
- 5. E300: 100-70% percent volume
- 6. Maximum Vapor Pressure
  - a. October 1 March January 31: 9.0 pounds per square inch (psi)
  - b. February: 13.5 psi
  - c. March: 11.5 psi
  - b. d. April: 10.0 psi
  - e. e. May: 9.0 psi

- d. f. June 1 September 30: 7.0 psi for CARB Phase 2 gasoline and 7.2 psi for CARB Phase 3 gasoline
- 7. Oxygen and Oxygenates
  - a. Minimum Content:
    - i. November 1 March January 31: 10% percent ethanol by volume
    - If A.R.S. § 41-2124(E) petition in effect: 2.7% percent oxygen by weight (other than ethanol) as approved by the Director.
    - ii. April February 1 October 31: 0% percent by weight (any oxygenate)
  - b. The maximum oxygen content shall not exceed 4.0% 3.7 percent by weight for ethanol and 3.5% by weight as specified in A.R.S. § 41-2122 for other oxygenates, and shall comply with the requirements of A.R.S. § 41-2123.
  - c. Arizona CBG shall not contain more than 0.3 volume percent MTBE nor more than 0.1 weight percent oxygen from all other ethers or alcohols listed in A.R.S. § 41-2122.
- 8. <u>Type 1 Arizona CBG shall meet a Federal Complex Model VOC Emissions Reduction</u>

  <u>Percentage emissions reduction percentage May 1 through September 15: > 25.0% 27 percent (Federal Complex Model settings: Summer, Area Class B, Phase 2). <u>Type 2 Arizona CBG shall meet CARB Phase 2 or Phase 3 PM requirements.</u></u>
- B. Wintertime requirements. In addition to the other requirements of this Article, the owner or operator of a motor fuel dispensing site or a fleet vehicle fueling facility shall ensure that beginning November 2 1 through March January 31 of each year, all Arizona CBG shall meet meets the following requirements. The dates in this subsection are compliance dates for service station operators and fleet owners.

Fuel Property Limits

1. Sulfur 80 ppm by weight (max)

2. Aromatics 30% by volume (max)

3. Olefins 10% by volume (max)

4. 90% Distillation Temp. (T90) 330° F (max)

5. 50% Distillation Temp. (T50) 220° F (max)

6. Vapor Pressure 9.0 psi (max)

7. Oxygenate - Ethanol

a. Minimum oxygenate content - 10% percent ethanol by volume

- b. Maximum oxygen content 4.0% 3.7 percent oxygen by weight, and shall comply with the requirements of A.R.S. § 41-2123.
- c. Alternative oxygenates minimum ethanol content may be used if approved by the Director under A.R.S. § 41-2124(D).
- C. Ethanol specifications. A person that uses ethanol as a blending component in AZRBOB or Arizona CBG shall ensure that the ethanol meets the requirements in ASTM D 4806-04a and the following:
  - 1. A sulfur content not exceeding 10 parts per million by weight,
  - 2. An olefins content not exceeding 0.5 percent by volume, and
  - 3. An aromatic hydrocarbon content not exceeding 1.7 percent by volume.
- C.D. General Elections elections. Except as provided in subsection (D) (E), all a registered suppliers supplier shall make an initial election, and a subsequent election each time a change occurs, before the beginning of to transport of the Arizona CBG or AZRBOB. Registered suppliers A registered supplier shall make the election with the Director on a form or in a format prescribed by the Director. The election shall state:
  - 1. Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with Type 1 <u>Arizona CBG</u>, Type 2 <u>Arizona CBG</u>, or the PM alternative gasoline formulation requirements; and
  - 2. For each applicable fuel property or performance standard for in the election in under subsection (C) (D)(1), whether the Arizona CBG or AZRBOB will comply with the average standards or per-gallon standards. A registered supplier shall not elect to comply with average standards unless the registered supplier is in compliance with R20-2-760. (A)
    A registered supplier shall not elect to comply with Type 1 Arizona CBG average standards in Table 1, columns B and C, from September 16 through November 1 October 31 and April February 1 through April 30.
- D. E. Winter elections. Beginning November 2 1 through March January 31 of each year, a registered supplier shall ensure that all Arizona CBG or AZRBOB shall comply complies with Type 2 gasoline Arizona CBG requirements or the PM alternative gasoline formulation requirements under Table 2. All A registered suppliers supplier shall make an initial election, and a subsequent election each time a change occurs, before the beginning of to transport of the Arizona CBG or AZRBOB. Registered suppliers A registered supplier shall make the election with the Director on a form or in a format prescribed by the Director. The election shall state:

- Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with the Type 2 gasoline Arizona CBG or the PM alternative gasoline formulation requirements; and
- 2. For each applicable fuel property, whether the Arizona CBG or AZRBOB will comply with the average standards or per\_gallon standards.
- E. F. Certification as Type 1 Arizona CBG or Type 2 Arizona CBG. Registered suppliers A registered supplier shall certify Arizona CBG or AZRBOB under R20-2-752 as meeting all requirements of the election made in subsection (C) or (D) or (E). For each fuel property, Type 1 gasoline Arizona CBG shall comply with the requirements in either column A<sub>7</sub> or columns B through D of Table 1, and shall be certified using the Federal Complex Model. For each fuel property, Type 2 gasoline Arizona CBG shall comply with the requirements of columns A and B (averaging option), or column C in Table 2. The PM alternative gasoline formulation shall meet the requirements of subsections (F), (G), and (H), and (I) and column A of Table 2. A registered supplier may certify Arizona CBG or AZRBOB using an equivalent test method approved by the Department under R20-2-759.
- F.G. Certification and Use use of Predictive Model for Alternative alternative PM-Gasoline Formulations gasoline formulations.
  - 1. Except as provided in subsections (F) (G)(4) and (H) (I), the use of a registered supplier shall use the PM shall be as provided in the Predictive Model Procedures.
  - 2. A registered supplier shall certify a PM alternative gasoline formulation with the Director by either:
    - a. Submitting to the Director a complete copy of the documentation provided to the executive officer of the California Air Resources Board CARB according to 13 California Code of Regulations, Section 2264 and subsection (H) (I); or
    - b. Notifying the Director, on a form prescribed by or in a format acceptable to the Director, of:
      - i. The PM alternative specifications that apply to the final blend, including for each specification whether it is a PM flat limit or a PM averaging limit; and
      - ii. The numerical values for percent change in emissions for oxides of nitrogen and hydrocarbons determined in accordance with the Predictive Model Procedures.
  - 3. The A registered supplier shall deliver the certification required under subsection (G)(2) to the Director before the beginning of transport of transporting the PM alternative gasoline formulation.

- 4. Restrictions for elections to sell or supply final blends as PM alternative gasoline formulations.
  - a. A registered supplier may shall not make a new election to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation if the registered supplier has any an outstanding requirements requirement under subsection (J) to provide offsets for fuel properties at the same production or import facility under subsection (I).
  - b. If a registered supplier elects to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation subject to a PM averaging compliance option for one or more fuel properties, the registered supplier may shall not elect any other compliance option, including another PM alternative gasoline formulation, if an outstanding requirements requirement to provide offsets for fuel properties exist exists under the provisions of subsection (1) (J). This subsection shall does not preclude a registered supplier from electing another PM alternative gasoline formulation if:
    - i. The PM flat limit for one or more fuel properties is changed to a PM averaging limit, or a single PM averaging limit for which there are is no outstanding requirements requirement to provide offsets, is changed to a PM flat limit;
    - ii. There are no changes to the PM alternative specifications for remaining fuel properties; and
    - iii. The new PM alternative formulation meets the criteria in the Predictive Model Procedures.
  - c. Once If a registered supplier elects to sell or supply from its the registered supplier's production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation, the registered supplier may shall not use a previously assigned designated alternative limit for a fuel property to provide offsets under subsection (I) (J).
  - d. If a registered supplier notifies the Director under subsection (C) or (D) or (E) that a final blend of Arizona CBG is sold or supplied from a production or import facility as a PM alternative gasoline formulation, all final blends of Arizona CBG or AZRBOB subsequently sold or supplied from that production or import facility are subject to the same PM alternative specifications until the registered supplier either:
    - Designates a final blend at that facility as a PM alternative gasoline formulation subject to different PM alternative specifications, or

- ii. Elects, under subsection (C) or (D) or (E), a final blend at that facility subject to a flat limit compliance option or an averaging compliance option.
- G. H. Prohibited activities regarding PM alternative gasoline formulations.
  - 1. A registered supplier shall not sell, offer for sale, supply, or offer to supply from its the registered supplier's production or import facility Arizona CBG that is reported as a PM alternative gasoline formulation under R20-2-752 if any of the following occur:
    - a. The elected PM alternative specifications do not meet the criteria for approval in the Predictive Model Procedures;
    - b. The registered supplier is prohibited by subsection (F) (G)(4)(a) from electing to sell or supply the gasoline as a PM alternative gasoline formulation;
    - c. The gasoline fails to conform with any PM flat limit in the PM alternative specifications election; or
    - d. With respect to any fuel property for which the registered supplier elects a PM averaging limit;:
      - i. The gasoline exceeds the applicable PM average limit in Table 2, column B, and no designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (F) (G)(2); or
      - ii. A designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (F) (G)(2), and either of the following occur: the gasoline exceeds the designated alternative limit for the fuel property; or when the designated alternative limit for the fuel property exceeds the PM averaging limit, and the exceedance is not fully offset in accordance with subsection (I) (J).
- H.I. Oxygen content requirements for PM alternative gasoline formulations. All alternative PM gasoline formulations from A registered supplier shall ensure that from November 1 through March January 31, all alternative PM gasoline formulations shall-comply with oxygen content requirements for the CBG\_covered area. Regardless of the oxygen content, a registered supplier shall certify the final alternative PM gasoline formulation shall be certified using the PM with a minimum oxygen content of 2.0% by weight. A registered supplier may use the CARBOB Model as a substitute for the preparation of an ethanol hand blend and use the fuel qualities calculated under the Model for compliance and reporting purposes.
- <u>H.J.</u> Offsetting <u>Fuel Properties</u> <u>fuel properties</u> and <u>Performance Standards</u> <u>performance standards</u>.

  <u>Each A</u> registered supplier <u>who that elects</u> to comply with the averaging standards for any of the fuel properties or performance standards contained in Tables 1 <del>or</del> <u>and</u> 2, or the PM, shall, <u>from a single production or import facility</u>, complete physical transfer <del>from the same</del>

production or import facility of certified Arizona CBG or AZRBOB in sufficient quantity to offset the amount by which the gasoline Arizona CBG or AZRBOB exceeds the averaging standard according to the following schedule:

- 1. Registered suppliers electing A registered supplier that elects to comply with the averaging standards contained in Table 2 or the PM shall offset each exceeded average standard within 90 days before or after the beginning of to transport of any final blend of Arizona CBG or AZRBOB from a the production or import facility;
- 2. Registered suppliers electing A registered supplier that elects to comply with the averaging standard for the VOC Emission Reduction Percentage in Table 1, column B, shall offset an exceedance of the standards standard that occurs from May 1 to September 15 of each ealendar year during that same time period; and
- 3. Registered suppliers electing A registered supplier that elects to comply with the averaging standard for the NOx Emission Reduction Percentage contained in Table 1, column B, shall offset an exceedance of the summer standard that occurs from May 1 to September 15 of each calendar year during that same time period.
- J. K. Consequence of failure to comply with averages.
  - 1. In addition to a penalty <u>under R20-2-762</u>, if any, <del>under R20-2-762</del>, a registered supplier who that fails to comply with the requirements a requirement of subsection (I) (J) shall meet the applicable per-gallon standards contained in Table 1, Table 2, or for any an alternative PM gasoline formulation, for a probationary period as follows:
    - a. For <u>a registered suppliers electing supplier that elects</u> to comply with the standards contained in Table 1, the probationary period begins on the first day of the next <del>corresponding</del> averaging season and ends on the last day of that averaging season if the conditions of subsection (K)(2) are met;
    - b. For <u>a</u> registered <u>suppliers electing</u> <u>supplier that elects</u> to comply with the standards contained in Table 2 or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives a notice from the Director, that the registered supplier did not comply with the requirements of subsection (1) (1). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period. The probationary period shall be ends 90 days after its beginning date.
  - 2. A registered supplier may shall not produce or import Arizona CBG or AZRBOB under an averaging compliance election until:
    - a. The registered supplier submits a compliance plan to the Director that includes:

- i. An implementation schedule for actions to correct noncompliance, and
- ii. Reporting requirements that document the plan implementation of the compliance plan;
- b. The Director approves the plan;
- c. The registered supplier implements the plan; , and
- d. The registered supplier achieves compliance.
- 3. If a registered supplier fails to comply with the requirements of subsection (I) (J) within one year of the end of a probationary period under subsection (J) (K)(1), the registered supplier shall comply with applicable per-gallon standards for a subsequent probationary period of two years, or until the conditions in subsection (J) (K)(2) are satisfied, whichever is later.
  - a. If a registered supplier elects <u>compliance</u> to comply with the Table 1 standards, the probationary period begins on the first day of the next <del>corresponding</del> averaging season.
  - b. If a registered supplier elects <u>compliance</u> to comply with the Table 2 standards or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives notice from the Director, that the registered supplier did not comply with the requirements of subsection (I) (J). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period.
- 4. If a registered supplier fails to comply with the requirements of subsection (I) (I) within one year of after the end of a probationary period provided under subsection (I) (K)(3), the registered supplier shall permanently comply with applicable per-gallon standards.
- K.L. Effect of VOC survey failure. Each time the CBG covered area fails a VOC survey conducted under R20-2-760 shows excess VOC emissions in the CBG-covered area, the VOC emissions performance reduction in R20-2-751(A)(8) and the minimum per-gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0% percent, not to exceed the VOC percent emissions reduction percentage per-gallon standard in Table 1, column A.
- L. M. Effect of NOx survey failure. Each time the CBG covered area fails a NOx survey conducted under R20-2-760 shows excess NOx emissions in the CBG-covered area, the NOx average emission reduction percentage applicable to the period of May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0% percent.

- M-N. Subsequent survey compliance. If the minimum VOC emission reduction percentage or average NOx emissions reduction percentage has been made more stringent according to subsection (K) or (L) or (M) and the CBG covered area passes all emissions reduction surveys for VOC or NOx for two consecutive years show emissions within the applicable adjusted reduction percentage in the CBG-covered area, the applicable VOC or NOx emissions adjusted reduction percentage adjusted standard shall be reduced by an absolute 1.0% percent beginning in the year following the second year of the compliant survey surveys. Each standard emissions reduction percentage adjusted under this subsection shall not be decreased below the following:
  - 1. >25.0% 27 percent for the VOC Emission Reduction Percentage emissions reduction percentage, May 1 September 15, Table 1, column C; and
  - 2. >6.8% percent for the NOx Emission Reduction Percentage emissions reduction percentage, May 1 September 15, Table 1, column B.
- N.O. Subsequent survey failures. If a VOC or NOx emissions reduction percentage is made less stringent under subsection (M) (N) and the CBG covered area fails a subsequent VOC or NOx survey shows excess VOC or NOx emissions in the CBG-covered area:
  - 1. For a VOC survey failure, the Federal Complex Model VOC emissions reduction percentage in R20-2-751(A)(8) and the minimum per gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0% percent, not to exceed the VOC percent emissions reduction percentage per gallon standard in Table 1, column A;
  - 2. For a NOx survey failure, the NOx average emission reduction percentage applicable to the period of May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0% percent; and
  - 3. The If the VOC or NOx emission reduction percentage for the performance standard is increased under subsection (O)(1) or (O)(2), the VOC or NOx emission reduction percentage shall not be made less stringent regardless of the results result of subsequent surveys for that performance standard VOC or NOx emissions.
- O.P. Effective date for adjusted standards. If a performance standard is adjusted by operation of subsections (K), subsection (L), (M), or (N), or (O), the effective date for the change shall begin with is the beginning of the next averaging season for which the standard is applicable.

#### **R20-2-752.** General Requirements for Registered Suppliers

- A. A registered supplier shall certify that each batch of Arizona CBG or AZRBOB transported for sale or use in the CBG\_covered area meets the standards in this Article.
- B. The A registered supplier shall sign make the certification on a form or in a format prescribed by the Director. The registered supplier shall include in the certification shall include information on the shipment volumes, fuel properties as determined under R20-2-759, and performance standards for each batch of Arizona CBG or AZRBOB. For each batch transported, the The registered supplier shall submit the certification to the Director on or before the 15th day of each month for the each batch of Arizona CBG or AZRBOB transported during the previous month.
- C. Recordkeeping and records retention.
  - 1. Each A registered supplier who that samples and analyzes a final blend or shipment of Arizona CBG or AZRBOB under this Section shall maintain, for five years from the date of each sampling, records of the following:
    - a. Sample date;
    - b. Identity of blend or product sampled;
    - c. Container or other vessel sampled;
    - d. The final blend or shipment volume; and
    - e. The <u>test results for sulfur</u>, aromatic hydrocarbon, olefin, oxygen, RVP, and as applicable, T50, T90, E200, and E300 as determined under R20-2-759.
  - 2. All If Arizona CBG or AZRBOB produced or imported by a registered supplier, that is not tested as required by this Section, the Director shall be deemed deem the Arizona CBG or AZRBOB to have a RVP, sulfur, aromatic hydrocarbon, olefin, oxygen, T50, and T90 exceeding that exceeds the standards specified in R20-2-751, or exceeding the comparable PM averaging limits, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable standards and fuel property limits for fuel properties and performance standards.
  - 3. A registered supplier shall provide to the Director any records maintained by the registered supplier under this <u>subsection</u> Section within 20 days of a written request from the Director. If a registered supplier fails to provide records for a blend or shipment of Arizona CBG or AZRBOB <u>under this Section</u>, <u>the Director shall deem</u> the final blend or shipment of Arizona CBG or AZRBOB <u>shall be deemed supplied</u> in violation of R20-2-751, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable <u>standards and fuel property</u> limits <u>for fuel properties</u> and performance standards.

- D. Notification requirement. A registered supplier shall notify the Director by facsimile prior to the beginning of transport of fax before transporting Arizona CBG or AZRBOB into the CBG-covered area by a means other than a pipeline.
- E. Quality Assurance and Quality Control (QA/QC) Program. A registered supplier shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the registered supplier's laboratory testing of Arizona CBG or AZRBOB. The registered supplier shall submit the QA/QC program shall be submitted to the Director for approval at least three months before transport of the registered supplier transports Arizona CBG or AZRBOB. Instead of developing a QA/QC program, a registered supplier may opt to comply with the independent testing requirements of subsection (F).

#### F. Independent testing.

- 1. A registered supplier of Arizona CBG or AZRBOB who that does not comply with subsection (E) develop a QA/QC program shall conduct a program of independent sample collection and analyses analysis for the Arizona CBG or AZRBOB produced or imported, that complies with one of the following:
  - a. Option 1. A registered supplier shall, for each batch of Arizona CBG or AZRBOB produced or imported, have an independent laboratory collect and analyze a representative sample from the batch using the methodology specified in R20-2-759 for compliance with each fuel property or and performance standard for which the Arizona CBG or AZRBOB is certified.
  - b. Option 2. A registered supplier shall have an independent testing program for all Arizona CBG or AZRBOB produced that the registered supplier produces or imported imports that consists of the following:
    - i. An independent laboratory shall collect a representative sample from each batch;
    - ii. The Director or designee shall identify up to 10% of the total number of samples collected under subsection (F)(1)(b)(i) for analysis; and
    - iii. The designated independent laboratory shall, for each sample identified by the Director or designee, analyze the sample using the methodology specified in R20-2-759 for compliance with each fuel property or and performance standard for which the batch Arizona CBG or AZRBOB is certified.
- 2. The Director or designee may request a portion duplicate of the batch sample collected under subsection (F)(1)(a) or (F)(1)(b) for analysis by a laboratory selected by the Director or designee. The registered supplier shall submit a duplicate of the sample to the Director within 24 hours of written request.

- 2.3. Designation of Independent Laboratory independent laboratory.
  - a. A registered supplier who that does not comply with subsection (E) develop a QA/QC program shall designate one independent laboratory for each production or import facility at which the registered suppler produces or imports Arizona CBG or AZRBOB is produced or imported. The independent laboratory shall collect samples and perform analyses according to subsection (F).
  - b. A registered supplier shall identify the designated independent laboratory to the Director under the registration requirements of R20-2-750.
  - c. A laboratory is considered independent if:
    - i. The laboratory is not operated by a registered supplier or the registered supplier's subsidiary or employee;
    - ii. The laboratory does not have any interest in any registered supplier; and
    - iii. The registered supplier does not have any interest in the <u>designated</u> laboratory.
  - d. Notwithstanding the restrictions in subsections subsection (F)(2)(e)(i) through (iii) (F)(3)(c), the Director shall consider a laboratory independent if it is owned or operated by a gasoline pipeline company owned or operated by four or more producers or importers registered suppliers.
  - d.e. A registered supplier shall not use a laboratory that is debarred, suspended, or proposed for debarment according to the Government-wide Debarment and Suspension regulations, 40 CFR 32, or the Debarment, Suspension and Ineligibility provisions of the Federal Acquisition Regulations, 48 CFR 9(9.4).
- 3. 4. A registered supplier shall eause ensure that its designated independent laboratory to:
  - a. Record Records the following at the time the designated independent laboratory collects a representative sample from a batch of Arizona CBG or AZRBOB:
    - i. The producer's or importer's assigned batch number for the batch being sampled;
    - ii. The volume of the batch;
    - iii. The identification number of the gasoline storage tank or tanks in which the batch is stored at the time the sample is collected;
    - iv. The date and time the batch became Arizona CBG or AZRBOB, and the date and time the sample is collected;
    - v. The date and time the sample is collected;
    - v. vi. The grade of the batch (for example, unleaded premium, unleaded mid-grade, or unleaded); and

- vi. vii. For Arizona CBG or AZRBOB produced by computer-controlled in-line blending, the date and time the blending process began and the date and time the blending process ended, unless exempt under subsection (G);
- b. Retain Retains each sample collected under this subsection for at least 45 days, except unless this time may be is extended by the Director for up to 180 days upon request by the Director;
- c. <u>Submit Submits</u> to the Director a quarterly report on the 15th day of January, April, July, and October of each year. <u>The report shall include that includes</u>, for each sample of Arizona CBG or AZRBOB analyzed under subsection (F):
  - i. The results of the independent laboratory's analyses for each fuel property, and
  - ii. The information specified in subsection  $\frac{F}{3}(a)$  (F)(4)(a) for each sample; and
- d. Supply Supplies to the Director, upon request, a portion duplicate of the sample.
- G. Exemptions to QA/QC and Independent Laboratory Testing Requirements independent laboratory testing requirements. A registered supplier who that produces or imports Arizona CBG or AZRBOB using computer-controlled in-line blending equipment and is operating operates under an exemption from EPA under 40 CFR 80.65(f)(4), is exempt from the requirements of subsections (E) and (F), provided that if reports of the results of the independent audit program of the refiner's registered supplier's computer-controlled in-line blending operation, which are submitted to EPA under 40 CFR 80.65(f)(4), are submitted to the Director by March 1 of each year.
- H. Use of Laboratory Analysis for Certification laboratory analysis for certification of Arizona CBG and AZRBOB.
  - 1. If both a registered supplier and an independent laboratory collect a sample <u>from the same</u>

    <u>batch of Arizona CBG or AZRBOB</u> and perform a laboratory analysis <u>under subsection</u>

    (F) to determine <u>compliance of the sample with</u> a fuel property <u>for the same batch for</u>

    <u>compliance with subsection (F)</u>, the results of the analysis conducted by the registered supplier shall be used for certification of the Arizona CBG or AZRBOB under subsection

    (B), unless the absolute value of the difference between the two <u>laboratory test</u> results is larger than <u>one of</u> the following:

	Fuel Property	Range
a.	Sulfur content	25 ppm by weight
b.	Aromatics	2.7% by volume
c.	Olefins	2.5% by volume

d. Ethanol 0.4% by volume

e. Methanol 0.2% by volume

f. MTBE (and other methyl ethers) 0.6% by volume

g. ETBE (and other ethyl ethers) 0.6% by volume

h. TAME 0.6% by volume

i. t-Butanol content 0.6% by volume

<del>j.</del> RVP 0.3 psi

k.f. 50% distillation temperature 5° Fahrenheit ASTM reproducibility for that sample

1-g. 90% distillation temperature 5° Fahrenheit ASTM reproducibility for that sample

m. <u>h.</u> E200 2.5% by volume

<del>n.</del> <u>i.</u> E300 3.5% by volume

o. j. API gravity 0.3° API

- 2. If the absolute value of the differences of difference between the results of the analyses conducted by the registered supplier and independent laboratory is larger than one of the values specified in subsection (H)(1), the registered supplier shall use one of the following laboratory testing results for certification of the batch of Arizona CBG or AZRBOB under subsection (B):
  - a. The larger of the two values for the <u>each</u> fuel property, except that the smaller of the two values shall be used for <u>measures of</u> oxygenates; or
  - b. The registered supplier shall have Have one additional independent laboratory analyze the Arizona CBG or AZRBOB for the each fuel property. If the laboratory difference between the results obtained by the additional independent laboratory and those obtained by the registered supplier is are within the range listed in this subsection (H)(1) as compared to the results obtained by the registered supplier, the registered supplier's laboratory analysis results shall be used for certifying the Arizona CBG or AZRBOB certification under subsection (B).

#### R20-2-753. General Requirements for Pipelines and Third-party Terminals

A. A pipeline or third-party terminal shall not accept Arizona CBG or AZRBOB for transport unless:

- The Arizona CBG or AZRBOB is physically transferred from an importer, refiner, oxygenate blender, pipeline, or third-party terminal registered with the Department under R20-2-750; and
- 2. The <u>registered</u> supplier provides written verification that the gasoline is Arizona CBG or AZRBOB and complies with the standards in R20-2-751(A) or (B), as applicable, without reproducibility or numerical rounding.
- B. A pipeline or third-party terminal that transports Arizona CBG or AZRBOB shall collect a sample of each incoming batch. The pipeline or third-party terminal shall retain the sample for at least 30 days, except unless this time may be is extended for an individual samples sample for up to 180 days upon request by the Director.
- C. A pipeline shall conduct quality control testing of Arizona CBG or AZRBOB at a frequency of not less than at least one sample from one batch completing shipment per registered supplier per day at each input location.
- D. A pipeline shall provide the Director with a report summarizing the laboratory quality control testing results required in obtained under subsection (C) within 10 days of the end of each month. The report shall contain the quantity of Arizona CBG or AZRBOB, date tendered, whether the Arizona CBG or AZRBOB was transported by pipeline, present sample location, and laboratory analysis results.
- E. If any a batch does not meet the standards in R20-2-751(A) or (B), as applicable, but is within reproducibility, the pipeline shall notify the Director by facsimile fax within 48 hours with of the batch volume and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results.
- F. If any a batch does not meet the standards in R20-2-751(A) or (B), as applicable, including reproducibility, the pipeline or third-party terminal shall notify the Director by facsimile fax within 24 hours with of the batch quantity and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results. If the batch is in the pipeline's or third-party terminal's control, the pipeline or third-party terminal shall stop the prevent release of the batch from a distribution point until the batch is certified as meeting the standards in R20-2-751(A) or (B), as applicable.
- G. The A pipeline or third-party terminal shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the pipeline's or third-party terminal's laboratory testing. The QA/QC program for a pipeline or third-party terminals terminal shall include a description of the laboratory testing protocol used to verify that Arizona CBG or AZRBOB transported to the CBG-covered area, meets the standards in R20-2-751(A) or (B). The A pipeline or third-

party terminal shall submit the QA/QC <u>program</u> to the Director for approval at least three months before the first date the pipeline or third-party terminal transports begins to transport Arizona CBG or AZRBOB. If a pipeline or third-party terminal makes significant changes to the QA/QC program, the pipeline or third-party terminal shall resubmit the QA/QC program to the Director for review and approval. Within 30 days of receiving the changed QA/QC program, the Director shall determine whether the changed QA/QC program meets the quality objectives originally approved by the Department. The Director shall approve the changed QA/QC program if it meets the quality objectives.

- H. A portion of a facility that a third-party terminal uses for production, import, or oxygenate blending is exempt from this Section, but the third-party terminal shall be operated operate the exempt portion of the facility in compliance with requirements for registered suppliers in R20-2-752 and oxygenate blenders in R20-2-755, as applicable.
- I. A pipeline is not liable under R20-2-761 if it follows all of the procedures in this Section.

# R20-2-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending

- A. Application of Arizona CBG standards to AZRBOB.
  - 1. Determining whether AZRBOB complies with Arizona CBG standards.
    - a. If a registered supplier designates a final blend as AZRBOB and complies with the provisions of this Section, the fuel properties and performance standards of the final blend AZRBOB, for purposes of compliance with Tables Table 1 or 2, are determined by adding the specified type and amount of oxygenate ethanol to a representative sample of the AZRBOB and determining the fuel properties and performance standards of testing the resulting gasoline according to using the test methods in R20-2-759 or certifying the ARZBOB using the CARBOB model. If the registered supplier designates a range of amounts of oxygenate or more than one oxygenate type ethanol to be added to the AZRBOB, the minimum designated amount of the oxygenate having the smallest designated volume ethanol shall be added to the AZRBOB to determine the fuel properties and performance standards of the final blend resulting Arizona CBG. If a registered supplier does not comply with this subsection, the Department shall determine whether compliance of the final blend AZRBOB complies with applicable fuel property properties and performance standards, excluding requirements for RVP, shall be determined without adding oxygenate ethanol to the AZRBOB.

- b. In determining whether AZRBOB complies with the Arizona CBG standards, the registered supplier shall ensure that the ethanol oxygenate added shall be to the representative sample under subsection (A)(1)(a) is representative of the oxygenate ethanol the registered supplier reasonably expects will be subsequently added to the final blend AZRBOB.
- 2. Calculating the volume of a final blend of AZRBOB. If a registered supplier designates a final blend as AZRBOB and complies with this Section, the volume of a final blend AZRBOB is calculated for compliance purposes under R20-2-751 by adding the minimum designated amount of the oxygenate having the smallest volume ethanol designated by the registered supplier. If a registered supplier fails to comply with this subsection, the Department shall calculate the volume of the final blend AZRBOB for purposes of compliance with applicable fuel property properties and performance standards shall be calculated without adding the amount of oxygenate ethanol to the AZRBOB.
- B. Restrictions on transferring AZRBOB.
  - 1. A person shall not transfer ownership or custody of AZRBOB to any other person unless the transferee notifies the transferor in writing that:
    - a. The transferee is a registered oxygenate blender and will add oxygenate of ethanol in the types and amount (or within the range of amounts) designated in R20-2-757 before the AZRBOB is transferred from a final distribution facility, or
    - b. The transferee will take all reasonably prudent steps necessary to ensure that the AZRBOB is transferred to a registered oxygen oxygenate blender who adds the type and amount (or within the range of amounts) of oxygenate ethanol designated in R20-2-757 to the AZRBOB before the AZRBOB is transferred from a final distribution facility.
  - 2. A person shall not sell or supply AZRBOB Arizona CBG from a final distribution facility if the type and amount or range of amounts of oxygenate ethanol designated in R20-2-757 have has not been added to the AZRBOB.
- C. Restrictions on blending AZRBOB with other products. A person shall not combine any AZRBOB supplied from the facility at which # the AZRBOB is produced or imported with any other AZRBOB, gasoline, blendstock, or oxygenate, except for:
  - 1. Oxygenate of Ethanol in the type and amount (or within the range of amounts) specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility, or

- 2. Other AZRBOB for which the same oxygenate type and ethanol amount (or range of amounts) is specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility.
- D. Quality Assurance Sampling assurance sampling and Testing testing requirements for a registered supplier supplying AZRBOB from a production or import facility. A registered supplier supplying AZRBOB from a production or import facility shall use an independent third-party quality assurance sampling and testing program as described in subsection (E) or conduct a quality assurance sampling and testing program that meets the requirements of 40 CFR 80.69(a)(7), as it existed on July 1, 1996, except for the changes listed in subsections (D)(1) through (D)(3). 40 CFR 80.69(a)(7), July 1, 1996, is incorporated by reference and on file with the Department. A copy may be obtained at the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328. The material incorporated includes no future editions or amendments.:
  - 1. 40 CFR 80.69(a)(7). The word "RBOB" is changed to read "AZRBOB";
  - 2. 40 CFR 80.69(a)(7). "...using the methodology specified in § 80.46..." is changed to read "...using the methodology specified in R20-2-759...;"; and
  - 3. 40 CFR 80.69(a)(7)(ii). "(within the correlation ranges specified in § 80.65(e)(2)(i)" is changed to read "(within the ranges of the applicable test methods).". 40 CFR 80.69(a)(7), as it existed on July 1, 1996, is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.
- E. General requirements for an independent third-party quality assurance sampling and testing program. A registered supplier may contract with an independent third party that conducts a quality assurance sampling and testing program for one or more registered suppliers. The registered supplier shall ensure that the quality assurance sampling and testing program:
  - 1. Is designed and conducted by a third party that is independent of the registered supplier.

    To be considered independent:
    - a. The third party shall not be an employee of a registered supplier,
    - b. The third party shall not have an obligation to or interest in any registered supplier, and
    - c. The registered supplier shall not have an obligation to or interest in the third party;

- 2. Is conducted from November 1 through January 31 on all samples collected under the program design previously approved by the Director under subsection (G);
- 3. Involves sampling and testing that is representative of all Arizona CBG dispensed in the CBG-covered area;
- 4. Analyzes each sample for oxygenate according to the methodologies specified in R20-2-759;
- 5. Bases results on an analysis of each sample collected during the sampling period unless a specific sample does not comply with the applicable per gallon maximum or minimum standards for the fuel property being evaluated in addition to any reproducibility applicable to the fuel property;
- 6. Participates in a correlation program with the Director to ensure the validity of analysis results;
- 7. Does not provide advance notice, except as provided in subsection (F), of the date or location of any sampling;
- 8. Provides a duplicate of any sample, with information regarding where and the date on which the sample was collected, upon request of the Director, within 30 days after submitting the report required under subsection (E)(10);
- 9. Permits a Department official to monitor sample collection, transportation, storage, and analysis at any time; and
- 10. Prepares and submits a report to the Director within 30 days after the sampling is completed that includes the following information:
  - a. Name of the person collecting the samples;
  - b. Attestation by an officer of the third party that the sampling and testing was done according to the program plan approved by the Director under subsection (G) and the results are accurate;
  - <u>c.</u> Identification of the registered supplier for whom the sampling and testing program
    was conducted if the sampling and testing program was conducted for only one
    registered supplier;
  - d. <u>Identification of the area from which the samples were collected;</u>
  - e. Address of each motor fuel dispensing site from which a sample was collected;
  - <u>f.</u> Dates on which the samples were collected;
  - g. Results of the analysis of the samples for oxygenate type and oxygen weight percent, aromatic hydrocarbon, and olefin content, E200, E300, and RVP, and the calculated VOC or NOx emissions reduction percentage, as applicable;

- h. Name and address of each laboratory at which the samples were analyzed;
- <u>i.</u> <u>Description of the method used to select the motor fuel dispensing sites from which a sample was collected;</u>
- j. Number of samples collected at each motor fuel dispensing site; and
- k. Justification for excluding a collected sample if one was excluded.
- F. An independent third party that contracts with one or more registered suppliers to conduct a quality assurance sampling and testing program shall begin the sampling on the date selected by the Director. The Director shall inform the third party of the date selected at least 10 business days before sampling is to begin.
- G. To obtain the Director's approval of an independent third-party quality assurance sampling and testing program plan, the person seeking the approval shall:
  - 1. Submit the plan to the Director no later than January 1 to cover the sampling and testing period from November 1 through January 31 of each year, and
  - 2. Have the plan signed by an officer of the third party that will conduct the sampling and testing program.
- H. No later than September 1 of each year, a registered supplier that intends to meet the requirements in subsection (D) by contracting with an independent third party to conduct quality assurance sampling and testing from November 1 through January 31 shall enter into the contract and pay all of the money necessary to conduct the sampling and testing program. The registered supplier may pay the money necessary to conduct the sampling and testing program to the third party or to an escrow account with instructions to the escrow agent to release the money to the third party as the testing program is implemented. No later than September 15, the registered supplier shall submit to the Director a copy of the contract with the third party, proof that the money necessary to conduct the sampling and testing program has been paid, and, if applicable, a copy of the escrow agreement.
- E. I. Requirements for oxygenate blenders.
  - 1. Requirement to add oxygenate ethanol to AZRBOB. If an oxygenate blender receives AZRBOB from a transferor to whom the oxygenate blender has represented represents that oxygenate ethanol will be added to the AZRBOB, the oxygenate blender shall add ethanol to the AZRBOB oxygenate of in the types and amount (or within the range of amounts) identified in the documentation accompanying the AZRBOB.
  - 2. Additional requirements for oxygenate blending at terminals. An oxygenate blender who that makes a final blend of Arizona CBG by blending an oxygenate ethanol with any AZRBOB in a motor fuel storage tank, other than a truck used for delivering to deliver

- motor fuel to retail outlets or bulk purchaser consumer facilities a retail outlet or bulk-purchaser consumer facility, shall determine the oxygen content and volume of the Arizona CBG before shipping, by collecting and analyzing a representative sample of the Arizona CBG, using the methodology in R20-2-759.
- 3. Additional requirements for oxygenate blending in trucks. An oxygenate blender who that blends AZRBOB in a motor fuel delivery truck shall conduct quality assurance sampling and testing that meets the requirements in 40 CFR 80.69(e)(2), as it existed on July 1, 1996, except:—for the changes listed in subsections (I)(3)(a) through (I)(3)(c). 40 CFR 80.69(e)(2), July 1, 1996, is incorporated by reference and on file with the Department. A copy may be obtained at the U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.D. 20402-9328. The material incorporated includes no future editions or amendments.
  - a. 40 CFR 80.69(e)(2). The word "RBOB" is changed to read "AZRBOB"; "
  - b. 40 CFR 80.69(e)(2)(iv). "... using the testing methodology specified at § 80.46 ..." is changed to read "... using the testing methodology specified in R20-2-759..."; :"and
  - c. 40 CFR 80.69(e)(2)(v). "(within the ranges specified in § 80.70(b)(2)(I),)" is changed to read "(within the ranges of the applicable test methods)". ." 40 CFR 80.69(e)(2), as it existed on July 1, 1996, is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.
- 4. Additional requirements for in-line oxygenate blending in pipelines using computercontrolled blending.
  - a. An oxygenate blender who that produces Arizona CBG by blending oxygenate ethanol with AZRBOB into a pipeline using computer-controlled in-line blending shall, for each batch of Arizona CBG produced:
    - i. Obtain a flow proportional composite sample after the addition of oxygenate
       <u>ethanol</u> and before combining the resulting Arizona CBG with any other Arizona
       CBG;
    - ii. Determine the oxygen content of the Arizona CBG by analyzing the composite sample within 24 hours of blending using the methodology in R20-2-759; and
    - iii. Determine the volume of the resulting Arizona CBG.

- b. If the test results for the Arizona CBG indicate that it does not contain the specified type and amount of oxygenate ethanol specified by within the ranges of the applicable test methods, the oxygenate blender shall:
  - i. Notify the pipeline to downgrade the Arizona CBG to conventional gasoline or transmix upon arrival in Arizona;
  - ii. Begin an investigation to determine the cause of the noncompliance;
  - iii. Collect spot samples a representative sample every two hours during each in-line blend of AZRBOB and oxygenate ethanol, and analyze the samples with within 12 hours of collection, until the cause of the noncompliance is determined and corrected; and
  - iv. Notify the Director in writing within one business day that the Arizona CBG does not comply with the requirements of this Article.
- <u>c.</u> The oxygenate blender shall comply with this subsection (I)(4)(b)(iii) until the Director approves determines that the corrective action taken under subsection (iii) has remedied the noncompliance.
- 5. Recordkeeping and Records Retention records retention.
  - a. An oxygenate blender shall maintain, for five years from the date of each sampling, records of the following:
    - i. Sample date,
    - ii. Identity of blend or product sampled,
    - iii. Container or other vessel sampled,
    - iv. The Volume of final blend or shipment volume, and
    - v. The oxygen Content as determined under R20-2-759, and
    - vi. Results from all testing.
  - b. The Director shall deem that Arizona CBG blended by an oxygenate blender that is and not tested as required by this Section shall be deemed to have has an oxygen content exceeding that exceeds the standards specified in R20-2-751, or exceeding exceeds the comparable PM averaging limits, if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards in R20-2-751.
  - c. Within 20 days of the Director's written request, an oxygenate blender shall provide any records maintained by the oxygenate blender under R20-2-755 this Section. If an the oxygenate blender fails to provide records requested for a blend or shipment of Arizona CBG under this Section, the Director shall deem that the final blend or

- shipment of Arizona CBG shall be deemed in violation of violates R20-2-751, or deemed to exceed exceeds the comparable PM averaging limits, if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards and limits under R20-2-751.
- 6. Notification requirement. An oxygenate blender shall notify the Director by facsimile prior to the beginning of transport of fax before transporting Arizona CBG or AZRBOB into the CBG-covered area by a means other than a pipeline.
- 7. Quality Assurance assurance and Quality Control quality control (QA/QC) Program program. An oxygenate blender conducting laboratory that conducts sampling and analysis testing under subsection (E) (I) in the oxygenate blender's own laboratory shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the oxygenate blender's laboratory sampling and testing of Arizona CBG or AZRBOB. The oxygenate blender shall submit the QA/QC program to the Director for approval at least three months before transport of transporting Arizona CBG. Instead of developing a QA/QC program, an oxygenate blender may opt to comply with the independent testing requirements of R20-2-752(F), except that, for sampling and analysis conducted under subsection (E)(3) (I)(3), the minimum number of samples collected and analyzed tested by the independent laboratory shall be 10% of the number of samples required to be analyzed collected and tested under subsection (E)(3) (I).
- 8. An oxygenate blender <u>that does</u> not <u>conducting conduct</u> laboratory sampling and analysis required under subsection (E) (I) in its own laboratory shall designate an independent laboratory, as <u>required described</u> in R20-2-752(F), to conduct <del>all of</del> the <u>laboratory</u> sampling and <u>analysis testing</u> required under subsection (E) (I)(7).
- 9. Within 24 hours of the Director Director's or designee's written request, an oxygenate blender shall submit a portion duplicate of any sample collected under subsection (E)(7) or (8) (I)(7).

#### R20-2-757. Product Transfer Documentation; Records Retention

- A. If a person transfers custody or title to any Arizona CBG or AZRBOB, other than when Arizona CBG is sold or dispensed at a service station motor fuel dispensing site or fleet vehicle fueling facility, the transferor shall provide to the transferee documents that include the following:
  - 1. The name Name and address of the transferor;
  - 2. The name Name and address of the transferee;

- 3. The volume Volume of Arizona CBG or AZRBOB being transferred;
- 4. The location Location of the Arizona CBG or AZRBOB at the time of the transfer;
- 5. The date Date of the transfer;
- 6. Product transfer document number;
- 7. Identification of the gasoline as Arizona CBG or AZRBOB;
- 8. The minimum Minimum octane rating of the Arizona CBG or ARZBOB;
- 9. The applicable Federal Complex Model VOC and NOx reduction percentage standards contained in R20-2-751(A) to which the Arizona CBG or AZRBOB conforms;
- 10. For oxygenated Arizona CBG designated for sale for use in motor vehicles from November 1 through March January 31, the type and minimum quantity of oxygenate ethanol contained in the Arizona CBG; and
- 11. 10. In the case of If the product transferred is AZRBOB for which oxygenate ethanol blending is intended:
  - a. Identification of the fuel as AZRBOB, and a statement that the "AZRBOB does not comply with the standards for Arizona CBG without the addition of oxygenate"; ethanol;"
  - b. The designation Designation of the AZRBOB as suitable for blending with ethanol:

    i. Any oxygenate;
    - ii. Ether only; or
    - iii. A specified oxygenate type or types and amount or amounts;
  - c. The oxygenate type or types and Ethanol amount or range of amounts that the AZRBOB requires to meet the fuel properties or performance standards claimed by the registered supplier of the AZRBOB, and the applicable volume percent oxygenate ethanol and weight percent oxygen content specifications specification; and
  - d. Instructions to the transferee that the AZRBOB may not be combined with any other AZRBOB unless it the other AZRBOB has the same requirements for oxygenate type or types and ethanol amount or range of amounts.
- B. A registered supplier, third-party terminal, or pipeline may comply with subsection (A) by using standardized product codes on pipeline tickets if the codes are specified in a manual distributed by the pipeline to transferees of the Arizona CBG or AZRBOB, and the manual sets forth includes all required information for the Arizona CBG or AZRBOB.
- C. Any transferee in subsection (A), other than a registered supplier, oxygenate blender, thirdparty terminal, pipeline, service station motor fuel dispensing site operator, or fleet owner vehicle fueling facility shall retain product transfer documents for each shipment of Arizona

CBG or AZRBOB transferred during the 24-month period months preceding the most recent transfer or delivery. The transferee shall maintain product transfer or delivery documents for the 30-day period days preceding the most recent transfer or delivery at the business address listed on the product transfer document. The transferee may retain maintain all remaining product transfer or delivery documents for the preceding 24 months elsewhere but shall make them available to the Director within two working days from the time of request by the Director or designee.

- D. A service station operator motor fuel dispensing site or fleet owner vehicle fueling facility shall retain product transfer documents for each shipment of Arizona CBG delivered transferred during the 12 months preceding that shipment the most recent transfer. The documentation The motor fuel dispensing site or fleet vehicle fueling facility shall maintain product transfer documents for the three most recent deliveries transfers shall be maintained on the service station or fleet owners' premises. A service station operator or fleet owner The motor fuel dispensing site or fleet vehicle fueling facility may maintain documentation the remaining product transfer documents for the remainder of all deliveries for the 12 month period preceding 12 months elsewhere but shall make it available to the Director within two working days from the time of request by the Director.
- E. A registered supplier, oxygenate blender, third-party terminal, or pipeline shall retain product transfer documents for each shipment of Arizona CBG or AZRBOB transferred during the 60-month period 60 months preceding the most recent transfer or delivery. Transfer or delivery The transferee shall maintain product transfer documents made during the 30-day period for each shipment of Arizona CBG or AZRBOB transferred during the 30 days preceding the most recent transfer or delivery shall be maintained at the business address listed on the product transfer document. Documents The transferee may maintain all remaining product transfer documents for the remainder of all transfers or deliveries for the preceding 60 months elsewhere shall be available within two working days from the time of request by the Director or designee.
- F. When a person transfers custody or title of denatured ethanol that is intended for use as a blend component in AZRBOB or Arizona CBG, the person shall provide the transferee a document that prominently states that the denatured ethanol complies with the standards for denatured ethanol intended for use as a blend component in AZRBOB or Arizona CBG.
- F.G. Upon request by the Director or designee, a person shall present product transfer documents to the Department within two working days. Legible photocopies shall be of the product transfer documents are acceptable.

## R20-2-758. Adoption of Fuel Certification Models Repealed

The following documents are incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments.

- 1. The California Predictive Model (PM), California Air Resources Board's "California Procedures for Evaluating Alternative Specification for Phase 2 Reformulated Gasoline Using the California Predictive Model," as adopted April 20, 1995 (Predictive Model Procedures). A copy may be obtained at: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812.
- 2. The Federal Complex Model as contained in 40 CFR 80.45, January 1, 1999. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.

#### **R20-2-759.** Testing Methodologies

A. Except as provided in subsections (C) and (D), a person certifying Arizona CBG or AZRBOB as meeting standards under Table 1 shall test the fuel with the methods under 13 California Code of Regulations, Section 2263, incorporated by reference as of January 1, 1997 and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812. Except as provided in subsection (C), a registered supplier or importer certifying Arizona CBG or AZRBOB as meeting the requirements of this Article shall use one of the methods listed in the Table in this Section. A copy of the EPA- or CARB-approved ASTM methods may be obtained at: American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, PA 19428-2959. A copy of the CARB methods may be obtained at: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812.

# Arizona Department of Weights and Measures Test Methods for Arizona CBG and AZRBOB

<u>Fuel</u>	<u>Units</u>	EPA-approved	EPA-approved	CARB-	CARB-
<b>Parameter</b>		<b>Test Method</b>	Reproducibility	approved	<u>approved</u>
				<u>Test</u>	Reproducibility

				Method	
Aromatics	<u>V%</u>	D 5769-98			
	<u>V%</u>	<u>D 1319-02a<sup>A</sup></u>	1.65	<u>D 5580-</u>	1.4
				00	
Benzene	<u>V%</u>	<u>D 3606-99</u>	0.21	<u>D 5580-</u> <u>00</u>	0.1409 (X) 1.133
Olefins	<u>V%</u>	<u>D 1319-02a</u>	0.32 (x) <sup>0.5</sup>	D 6550- 00	0.32 (X) 0.5; Footnote 1
Oxygenates	<u>W%</u>	D 5599-00	See test method	<u>D 4815-</u> <u>99</u>	See test method
	<u>W%</u>	<u>D 4815-99<sup>B</sup></u>	See test method		
Vapor Pressure (Correlation Equation) Footnote 2	psi	<u>D 5191-01</u>	0.3	13 CCR Section 2297	0.21
Sulfur	<u>wppm</u>	<u>D 2622-98</u>		<u>D 5453-</u> <u>93</u>	0.2217 (x) <sup>0.92</sup> wppm
				D 2622- 94 (modified)	$     \frac{10-30 \text{ wppm}}{R=0.405 \text{ (x)}} \\                                   $
Distillation T50	deg F	<u>D 86-01</u>	See test method	<u>D 86-</u> <u>99ae1</u>	See test method
Distillation T90	deg F	<u>D 86-01</u>	See test method	<u>D 86-</u> <u>99ae1</u>	See test method

<sup>&</sup>lt;sup>A</sup> A refinery or importer may determine aromatics content using ASTM D 1319-02a if the result is correlated to ASTM D 5769-98.

# Footnotes:

<sup>&</sup>lt;sup>B</sup> A refinery or importer may determine oxygenate content using ASTM D 4815-99 if the result is correlated to ASTM D 5599-00.

- 1. Replace the last sentence in ASTM D 6550-00 section 1.1 with the following. "The application range is from 0.3 to 25 mass % total olefin, as defined in section 2263(b), Title 13, California Code of Regulations."
- 2. When determining RVP, the only correlation equation to be used is the CARB (RVP=(0.972\*Ptot) 0.715).
- B. Except as provided in subsection I, a person certifying Arizona CBG or AZRBOB as meeting standards under Table 2 shall test the fuel with methods under 13 California Code of Regulations, Section 2263, as incorporated by reference in subsection (A). An oxygenate blender or third-party terminal certifying Arizona CBG or AZRBOB before transport to the CBG-covered area shall measure ethanol in accordance with the oxygenate blender's or third-party terminal's approved QA/QC program or in accordance with one of the methods listed in the Table in this Section.
- C. A registered supplier, oxygenate blender, or third party terminal certifying Arizona CBG or AZRBOB before transport to the CBG covered area shall measure oxygenate using ASTM D4815-94a procedures and RVP using ASTM D4814-99 standards. For Arizona CBG located in the CBG covered area, oxygenate shall be measured using ASTM D4815-94a, and RVP shall be measured using ASTM D5191-99. ASTM D4814-99, ASTM D4815-94a and ASTM D5191-99 are incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. Copies may be obtained at American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, PA 19428-2959. Rather than using a method listed in the Table in this Section to certify Arizona CBG or AZRBOB, a registered supplier may use the CARBOB Model and use the fuel-quality measures calculated using the CARBOB Model for compliance and reporting purposes.
- D. Except as required in subsection I, a registered supplier of Arizona CBG or AZRBOB may certify Type 1 Arizona CBG produced or imported at any facility using the federal test methods contained in 40 CFR 80.46 (a) through (g), incorporated by reference as of July 1, 1996, provided these are the only test methods used by that registered supplier to certify Arizona CBG or AZRBOB at that facility. 40 CFR 80.46(a) through (g) is on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328. A test method that the Department determines is equivalent to those listed in the Table in this

Section may be used to certify Arizona CBG or AZRBOB. The Department has determined that test methods approved by either the EPA or CARB are equivalent test methods. To determine whether a proposed test method is equivalent to those listed in the Table in this Section, the Department shall review data from both the proposed and designated test methods to determine whether the precision of the proposed method is equal to or better than the precision of the designated method and whether there is significant bias between the two methods. A correlation equation may be required to align the two methods. If a correlation equation is required to align the two methods, the correlation equation becomes part of the equivalent method.

## **R20-2-760.** Compliance Surveys

- A. A registered supplier who elects to certify that Arizona CBG or AZRBOB meets <u>any an</u> averaging standard under R20-2-751 shall <u>conduct ensure that</u> compliance surveys <u>are conducted</u> in accordance with a <u>compliance</u> survey program plan approved by the Director. The Director shall approve a <u>compliance</u> survey program plan if it:
  - 1. Consists of <u>at least four VOC</u> and Nox surveys <u>during the period conducted at least one per</u> <u>month between</u> May 1 through September 15 of each year; and
  - 2. Complies with subsection I.
- B. If a registered supplier fails to <u>conduct</u> <u>ensure that</u> an approved <u>compliance</u> survey program <u>is</u> <u>conducted</u>, the Director shall issue an order requiring <u>compliance</u> the registered supplier to <u>comply</u> with all applicable <u>fuel property and performance</u> standards on a per-gallon basis for <u>at least</u> six months, <u>extending or</u> through the end of the survey period identified in subsection (A)(1), <u>and ending after the six month period which ever is longer</u>. The requirement for <u>Regardless of when a failure to survey occurs</u>, the <u>Director's order shall require</u> compliance with per-gallon standards <del>applies</del> from the beginning of the survey period during which the failure <u>to survey occurs</u>, <u>regardless of when the failure to survey occurs</u> during that period.
- C. General <u>compliance</u> survey requirements. <u>A registered supplier shall ensure that a compliance survey conforms to the following:</u>
  - 1. A survey shall consist Consists of all samples that are collected under the applicable an approved survey design program plan during any consecutive seven-day period seven days and that are not excluded under subsection I(4).;
  - 2. A survey shall be <u>Is</u> representative of all Arizona CBG being dispensed in the CBG-covered area as provided in subsection (F). (G):

- 3. Each Analyzes each sample included in a the compliance survey shall be analyzed for oxygenate type and content, olefins, sulfur, aromatic hydrocarbons, E200, E300, and RVP according to the methodologies specified test methods in R20-2-759. RVP shall be is required to be analyzed during the time period of only from May 1 through September 15-;
- 4. The Bases the results of each the compliance survey shall be based upon the results of the an analysis of each sample collected during the course of the compliance survey, unless a sample does not comply with the applicable per gallon maximum or minimum standards for the fuel property standard being evaluated in addition to any reproducibility that applies to the fuel property standard; ; and
- A survey sample that does not comply with R20-2-751, or that constitutes evidence of noncompliance with a standard or requirement under this Article, may be used by the Director in an enforcement action.
- 6. Each If a laboratory that analyzes the compliance survey samples, shall participate the laboratory participates in a correlation program with the Director to ensure the validity of analysis results.
- D. If the Director determines that a sample used in a compliance survey does not comply with R20-2-751 or another requirement under this Article, the Director shall take enforcement action against the registered supplier.
- D. E. The results of each VOC and Nox compliance survey shall be determined as follows requirements:
  - 1. For each <u>compliance survey</u> sample <u>from the survey</u>, <u>determine</u> the VOC and Nox emissions reduction percentage <u>is determined</u> based upon the tested fuel properties for that sample using the <u>applicable</u> methodology for calculating VOC and Nox emissions reductions at 40 CFR 80.45, as incorporated by reference in <del>R20-2-758</del> R20-2-702;
  - 2. The CBG-covered area fails the <u>a VOC compliance</u> survey if the VOC emissions reduction percentage average of all samples collected during that the compliance survey is less than the per-gallon standard for VOC emissions reduction percentage in Table 1, column A.
  - 3. The CBG\_covered area fails the <u>a Nox compliance</u> survey if the Nox emissions reduction percentage average of all samples collected during that the compliance survey is less than the per-gallon standard for Nox emissions reduction percentage in Table 1, column A.
- E. F. The A registered supplier shall determine the result results of each the series of Nox survey series compliance surveys conducted between May 1 and September 15 shall be determined as follows:

- For each <u>compliance survey</u> sample <u>from a survey series</u>, the Nox emissions reduction percentage is determined based upon the tested fuel properties for that sample using the <del>applicable</del> methodology for calculating Nox emissions reduction <del>under</del> <u>at</u> 40 CFR 80.45, as incorporated by reference in <del>R20 2-758</del> <u>R20-2-702</u>; and
- 2. The CBG-covered area fails the Nox survey series series of compliance surveys conducted between May 1 and September 15 if the Nox emissions reduction percentage average for all compliance survey samples collected during that survey series time is less than the Federal Complex Model per-gallon standard for the Nox emissions reduction percentage in Table 1, column A.
- F. G. Each survey program shall General requirements for an independent surveyor conducting a compliance survey. A registered supplier may have the compliance surveys required by this Section conducted by an independent surveyor. The Director shall approve a compliance survey program conducted by an independent surveyor if the compliance survey program:
  - 1. Be <u>Is</u> designed and conducted by a <u>person</u> <u>surveyor that is</u> independent of the registered supplier (the surveyor). To be considered independent:
    - a. The surveyor shall not be an employee of any registered supplier;
    - b. The surveyor shall not have <u>any an</u> obligation to or interest in any registered supplier; and
    - c. The registered supplier shall not have any an obligation to or interest in the surveyor.;
  - 2. Be designed to include Includes enough samples to ensure that the average levels of oxygen, RVP, aromatic hydrocarbons, olefins, T50, T90, and sulfur are determined with a 95% confidence level, with error of less than 0.1 psi for RVP, 0.1% for oxygen (by weight), 0.5% for aromatic hydrocarbons (by volume), 0.5% for olefins (by volume), 5°F. for T50 and T90, and 10 ppm wppm for sulfur;
  - 3. Require Requires that the surveyor :a. Except as provided in subsection (G), not inform anyone, in provide advance notice, except as provided in subsection (H), of the date or location of any survey sampling;
  - 4. b. Upon Requires that the surveyor request of the Director, provide a duplicate of any sample taken during the survey, with information regarding the name and address of the facility from and the date on which the sample was taken, upon request of the Director, within 30 days following submission of the survey report required under subsection (G)(6)÷;
    - i. To a location specified by the Director;

- ii. Identified by the name and address of the facility where the sample was collected; and
- iii. Showing the date of collection.
- <u>5.</u> e. Permit Requires that the surveyor permit a Department official at any time to monitor the conduct of the survey, including sample collection, transportation, storage, and analysis at any time;
- 4. <u>6. Require</u> Requires the surveyor to submit a report of each survey to the Director, within 30 days following completion of the survey, to the Director. The report shall include after sampling for the survey is completed that includes the following information:
  - a. The name Name of the person conducting the survey;
  - b. An attestation Attestation by an officer of the surveying company surveyor that the survey sampling and testing was conducted according to the compliance survey program plan and the survey results are accurate;
  - c. If Identification of the registered supplier for whom the compliance survey was conducted if the compliance survey was conducted for only one registered supplier, the identification of that supplier;
  - d. The identification Identification of the area from which gasoline survey samples were selected;
  - e. The dates Dates on which the survey was conducted;
  - f. The address Address of each facility at which a gasoline sample was collected, and the date of collection;
  - g. The results Results of the analyses analysis of samples for oxygenate type and oxygen weight percent, aromatic hydrocarbon, and olefin content, E200, E300, and RVP, and the calculated VOC or Nox emissions reduction percentage, as applicable, for each survey conducted during the period identified in subsection (A)(1);
  - h. The name Name and address of each laboratory where gasoline at which samples were analyzed;
  - i. A description Description of the methodology method used to select the locations for facilities from which a sample collection was collected and the numbers of samples collected;
  - j. Number of samples collected from each facility;
  - <u>j.k.</u> For Justification for excluding a collected sample any samples that were excluded from the survey, a justification for the exclusion if one was excluded; and
  - k.l. The average VOC and Nox emissions reduction percentage.

- G.H. Each survey shall be commenced An independent surveyor shall begin each survey on a date selected by the Director. The Director shall notify the surveyor of the date selected at least 10 business days before the beginning date of the survey is to begin.
- H.I.The procedure for seeking Director To obtain the Director's approval for a of a compliance survey program plan is, the person seeking approval shall:
  - The person seeking survey program plan approval shall submit Submit the plan to the
    Director for the Director's approval no later than January 1 to cover the survey period of
    May 1 through March 31 September 15 of each year; and
  - 2. The survey program Have the plan shall be signed by a corporate officer of the registered supplier, or in the case of a comprehensive survey program plan, by an officer of the organization coordinating the survey program independent surveyor.
- I.J. No later than April 1 of each year, the a registered supplier's contract with the surveyor supplier that intends to meet the requirements in subsection (A) by contracting with an independent surveyor to carry out conduct the entire compliance survey plan for the next summer and winter season shall be in effect, enter into the contract and the registered supplier shall pay an amount all of the money necessary to carry out the entire conduct the compliance survey plan. To the surveyor or The registered supplier may pay the money necessary to conduct the compliance survey plan to the independent surveyor or to place the money into an escrow account with instructions to the escrow agent to pay release the money over to the independent surveyor during the course of the conduct of as the compliance survey plan is implemented. No later than April 15 preceding the period in which a survey will be conducted, the registered supplier shall give submit to the Director a copy of the contract with the independent surveyor, proof that the money necessary to carry out conduct the compliance survey plan has either been paid to the surveyor or placed into an escrow account, and, if placed into an escrow account applicable, a copy of the escrow agreement.

Table 1. Type 1 Gasoline Arizona CBG Standards

	Non-averaging Option	Averaging Option		
	A	В	С	D
Performance Standard/Fuel Property**	Per-Gallon		Minimum	Maximum
refromance standard/ruer rroperty	(minimum)	Average	(per-gallon)	(per-gallon)

VOC Emission Reduction (%) May 1 - Sept. 15	> 27.5	> 29.0	> 25.0	N/A
Nox Emission Reduction (%) May 1 - Sept. 15	> 5.5	> 6.8	N/A	N/A
Nox Emission Reduction (%)  Sept. 16 - Nov. 1 October 31 and April	> 0.0	N/A	N/A	N/A
February 1 - April 30***  Oxygen content: ethanol, (% by weight unless otherwise noted)				
Nov. 2 <u>1</u> - <del>March</del> <u>January</u> 31***	N/A	N/A	N/A	N/A
April February 1 - Nov. 1 October 31	0.0*	N/A	0.0	4.0 <u>3.7</u>
Oxygen content: other than ethanol, (%				
by weight) Nov. 2 1 - March January 31***	N/A	N/A	N/A	N/A 2.7
April February 1 - Nov. 1 October 31	0.0	N/A	0.0	****

<sup>\*</sup> Maximum oxygen content must shall comply with the EPA oxygenate waiver requirements and with A.R.S. § 41-2122.

Table 2. Type 2-Gasoline Arizona CBG Standards

	Averaging Option		Non-averaging Option	
	A B		С	
Fuel Property			Flat Standard * (per gallon	Units of Standard

<sup>\*\*</sup> Dates represent compliance dates for service stations and fleet owners the owner of a motor fuel dispensing site or a fleet vehicle fueling facility.

<sup>\*\*\*</sup> Registered suppliers A registered supplier shall certify all Arizona CBG as Type 2 gasoline Arizona CBG meeting the standards in Table 2 beginning November 2 1 through March January 31.

<sup>\*\*\*\*</sup> As specified in A.R.S. § 41-2122.

	(per gallon)		maximum)	
Sulfur Content***	80/30	30/15	40 <u>/20</u>	Parts per million by weight
Olefin Content	10.0	4.0	6.0	% by volume
90% Distillation Temperature (T90)	330	290 <u>/295</u>	300 <u>/305</u>	Degrees Fahrenheit
50% Distillation Temperature (T50)	220	200/203	210 <u>/213</u>	Degrees Fahrenheit
Aromatic Hydrocarbon Content	30.0/35	22.0	25.0	% by volume
Oxygen content: ethanol**** ***  Nov. 2 1 - March January  31  April February 1 - Nov. 1  October 31  The maximum oxygen	10% ethanol <u>***</u> 2.7		10% ethanol <u>***</u> 2.7** 3.7	% by vol. % by weight
Oxygen content: other than ethanol****	-	-	-	-
Nov. 2 - March 31 April 1 - Nov. 1	3.5*** 2.7	_	3.5*** 2.7**	% by weight % by weight

<sup>\*</sup> Instead of the standards in columns B and C, a registered supplier may elect to comply with the standards contained in column A, and R20-2-751(F), (G), and (H) for the use of the PM.

<sup>\*\*</sup> Maximum oxygen content shall comply with the EPA oxygenate waiver requirements.

<sup>\*\*\*</sup> Non-ethanol oxygenate is allowed only if approved by the Director under A.R.S. § 41-2124(D). Maximum oxygen content shall comply with the EPA oxygenate waiver requirements.

\*\*\*\* A registered supplier shall certify all Arizona CBG using ethanol as the oxygenate beginning November 2 1 through March January 31. Alternative oxygenates ethanol contents not less than 2.7% total oxygen may be used if approved by the Director under A.R.S. § 41-2124(D).

\*\*\*\* S-RGAS may not exceed limits imposed by EPA.

NOTE NOTES: Dates represent compliance dates for service stations and fleet owners the owner of a motor fuel dispensing site or fleet vehicle fuel facility.

Standards shown in the form of x/y denote standards for CARB Phase 2/ Phase 3 gasolines.